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Sixty-Seventh Annual Report

of the

Director of Public Health for the Government of Bombay

For the Year 1930

With Appendices

including the

Annual Reports of the Health Officers of the Ports of Bombay, Karachi and Aden

[Price—Re. 1 As. 8 *or* 2*s.* 6*d.*]

BOMBAY
PRINTED AT THE GOVERNMENT CENTRAL PRESS
1931

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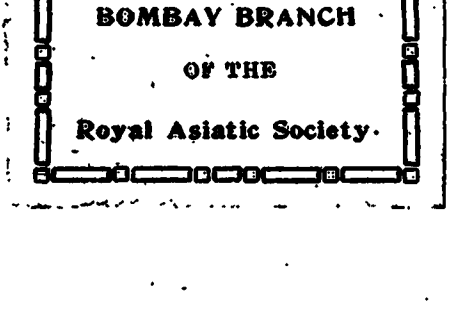

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ANNUAL REPORT ON PUBLIC HEALTH, 1930

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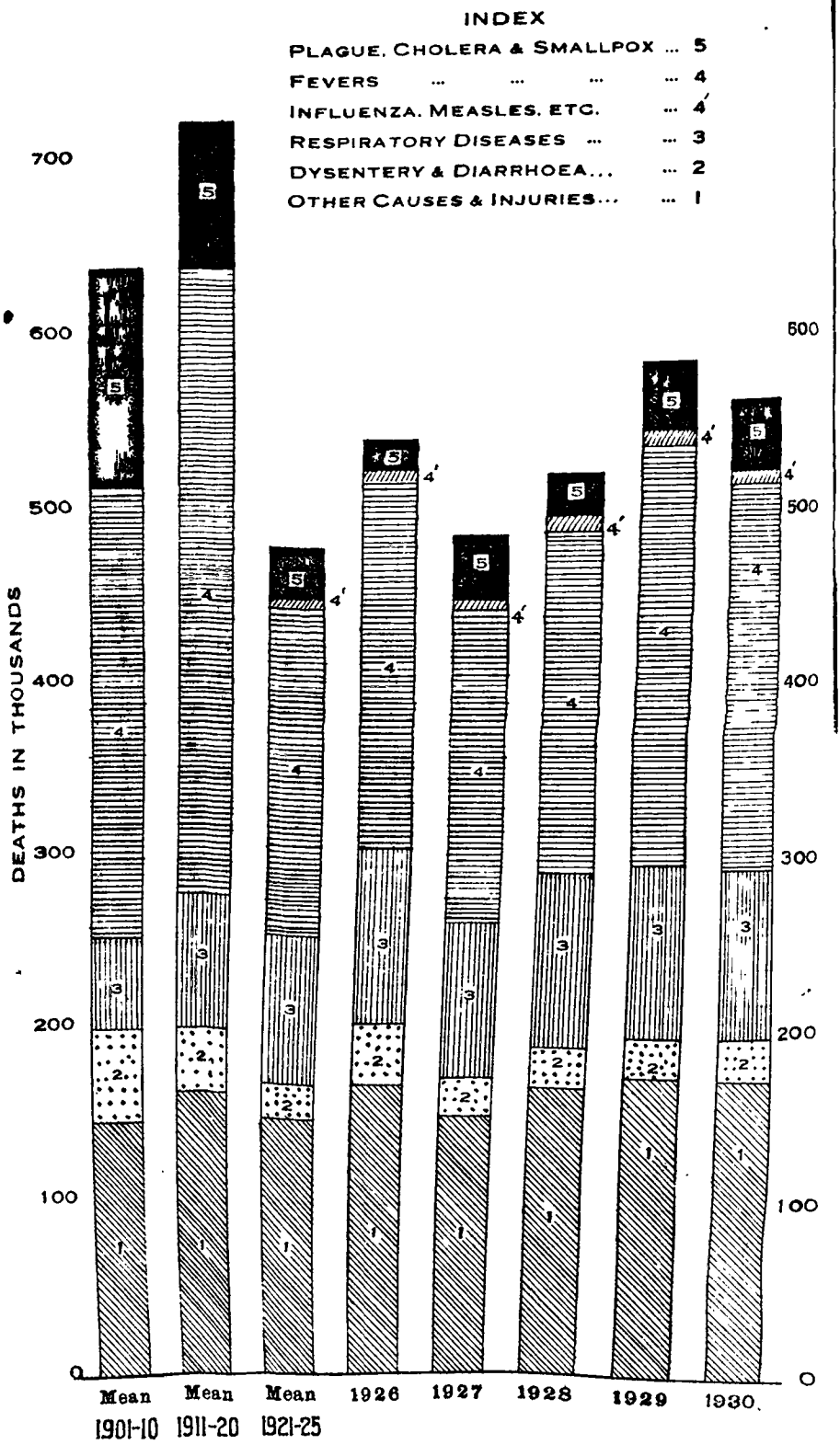
CHART I

DEATHS IN 1930 AND PREVIOUS YEARS



ANNUAL SANITARY REPORT FOR 1930

SECTIONS I TO IV—No remarks.

SECTION V.

GENERAL POPULATION AND VITAL STATISTICS.

Note.—The birth and death ratios are calculated on the Census population of 1921.

1. The total population of the Bombay Presidency is 19,195,082 consisting of Europeans, Anglo-Indians and Indians. The area in square miles is 122,578; average population per square mile 126.

Registration areas and Indian Civil population.—The Presidency is divided into five Registration Districts comprising 28 Collectorates (including Bombay City); 253 Rural Circles (Taluka and Mahal); 106 Town Circles and 9 Cantonments. Aden and Baroda Cantonments also submit returns to .this Department. These Divisions are shown in Appendix III to this Report. According to the 1921 Census the Indian population of the Presidency including Sind (19,165,614) was distributed as follows :—

Rural Circles 15,421,829; Town Circles 3,663,048; and Cantonment Circles 80,737.

Number of Local Bodies and Public Health Staff.—There are 155 Municipalities, 27 District Local Boards, 222 Taluka Local Boards, 579 Sanitary Committees and Village Panchayats, and 27 Notified Areas. There are 16 Municipal Medical Officers of Health, 88 Municipal Sanitary Inspectors and 3 District Medical Officers of Health, making in all 107 individuals to look after the Sanitation of an area of 122,578 square miles, i.e. one man for every 1,145 square miles which indicates a very inadequate provision for the supervision of the health of the Presidency.

2. *Births.*—The total number of births registered was 716,952 as compared with 733,520 births in 1929 and 672,879 the mean for the decennium.

There was a fall of about one per mille of the population in the birth-rate (37·41) recorded for the Presidency as a whole in the year under report, as compared with the previous two years, 1929 (38·27) and 1928 (38·17), but the rate was higher than in any one of the remaining years of the decennium. Normally the ratio recorded should have been higher as the calculations are based on the 1921 census, and the 1931 census indicates a general increase in population, but various factors have had their influence in producing this result. The decrease is noticeable in three Registration Districts, viz., Central, Gujarat and Sind. Plague and cholera in the Central, the Civil Disobedience Movement in Gujarat, and floods and economic conditions in Sind, were mainly responsible for the fall in the birth-rate.

When an epidemic prevails it is generally the population in the prime of life that chiefly succumbs, with the result that in that year, and, if the epidemic is severe, for a couple of the following years, the birth-rate is lowered.

There was plague and cholera in Satara District and cholera in Ahmednagar District, of the Central Registration District. Ratnagiri District also shows a reduced birth-rate but this was probably due to the Railway Strike, Civil Disobedience Movement, trade depression and to closure of some of the mills in Bombay which curtailed the usual exodus of the industrial workers back to their homes in Ratnagiri District.

On account of the Civil Disobedience Movement, the registration of vital statistics was thrown out of gear especially in the Gujarat Registration District as several police patels, who are the registering authorities in the villages, resigned, and the returns received from those who had not resigned were either inaccurate or blank as the statistical data could not be obtained on account of the non-co-operation of the public.

After the movement was suspended, efforts were made to get as many returns as possible and supplementary returns received from the Assistant Director are incorporated in this Annual Report. The statistics are naturally incomplete. When compared with the previous year for the same period it is noticed that the decrease is marked in areas where the movement prevailed and in proportion to the villages affected. But for this defect in registration, the birth-rate for the Gujarat Registration District would not have been less than in the previous two years.

Sind is notoriously defective in registration but when a comparison is made with itself for a period of years, this factor of error is greatly minimised. The birth-rate for the year under report was less by 3 per mille both for the urban and rural areas. The decrease is noticed throughout all districts, but it is most marked in the three districts, Sukkur, Larkana and Nawabshah which were affected by the floods.

The economic loss on account of the floods for two consecutive years, the epidemic of cholera and the fulminant type of malaria of the previous year had lowered the vitality of the people and is reflected in the birth-rate.

3. *Deaths.*—The total number of deaths registered during the year was 566,003 as compared with 585,046 in 1929 and 520,330, the mean for the quinquennium giving a death-rate of 29·53 per mille and 4·6 per square mile.

There was an increase in the death-rate in all the Provinces in India with the exception of Bengal and Bihar and Orissa, as compared with the year previous. The infantile death-rate in this Presidency was 187·14. It compares favourably with other Provinces. The highest infantile death-rate (241·87) was recorded in the Central Provinces and the lowest (137·87) in Bihar and Orissa.

The noticeable feature of this year is the exceptional rise in deaths from small-pox. The pandemic was forecasted, and in spite of mass vaccination that was carried out throughout the Presidency the mortality was the highest on record.

There was a considerable decrease in deaths from plague as compared with the previous year. The Southern Registration District was badly affected while the other Registration Districts escaped lightly.

There was a somewhat severe epidemic of cholera as compared with the previous two years. The Central Registration District was comparatively badly affected.

Though the deaths recorded under 'fevers' were less than those in 1929 they show a rise over the quinquennial mean.

4. *Europeans.*—Europeans who number 19,247 and Anglo-Indians who number 10,221 in the Presidency forming ·10 and ·05 per cent. of the population show health statistics as per following details :— 227 births were recorded against 265 equal to a birth-rate of 11·79 per mille of population against 13·77 in 1929. Of the births, 107 were males and 120 females against 144 and 121 in the previous year. There were 167 deaths equal to a death-rate of 8·68 as compared with 192 and 9·98 respectively in 1929. This fall is chiefly due to a drop from 134 to 111 in deaths in Bombay City where 59 per cent. of all the Europeans in the Presidency reside. Of these deaths, 94 were males and 73 females against 127 and 65 in the previous year. Of the 167 total deaths, 6 were due to small-pox, 12 to fevers, 11 to dysentery and diarrhœa, 23 to respiratory diseases, 18 to injuries and 96 to all other causes as compared with 7, 19, 16, 23, 13 and 114 respectively in the previous year. There was one death from cholera against nil in 1929. Of the 12 deaths from fevers, 9 were due to enteric fever—7 occurred in Bombay City and one each in Ahmedabad City and Bombay Suburban District.

As stated above, Bombay City shows a fall in mortality among Europeans—61 male and 50 female deaths against 91 and 43 respectively in 1929.

Deaths by ages.—Of the total deaths 12 occurred under one year, 12 between the age period of 1 and 5, 5 between 5 and 10, 5 between 10 and 15, 4 between 15 and 20, 13 between 20 and 30, 29 between 30 and 40, 24 between 40 and 50, 21 between 50 and 60, and 42 in the age period of 60 and upwards, making a total of 167 deaths in the Presidency as a whole.

5. *Anglo-Indians.*—231 births were registered against 265 in the previous year. The birth-rate per mille of population, for the year under report was 22·60 as compared with 25·93 in 1929. Of the births 129 were males and 102 females against 125 and 140 in the previous year. There were 157 deaths as against 178 in the previous year. The death-rate, per mille, for the year, was 15·36 against 17·41 in 1929. Of the deaths, 88 were males and 69 females against 98 and 80 in the previous year. Of the 157 deaths, 5 were due to small-pox, 15 to fevers, 21 to

dysentery and diarrhœa, 47 to respiratory diseases, 4 to injuries and 65 to all other causes as compared with 4, 16, 18, 43, 8 and 89 respectively in the previous year.

Of the 15 deaths from fevers, 4 were due to enteric fever 3 being reported from Bombay City and one from Dharwar District.

The Bombay City's contribution to the Anglo-Indian mortality was 65 male and 41 female deaths against 65 and 50 respectively in 1929.

Of the 106 deaths in Bombay City, small-pox caused 4 deaths, fever 11, dysentery and diarrhœa 12, respiratory diseases 28, injuries 3 and all other causes 48 against 4, 7, 13, 27, 6 and 58 respectively in the previous year.

Of the total deaths, 41 occurred under one year, 22 between the age period of 1 and 5, 3 between 5 and 10, 2 between 10 and 15, 6 between 15 and 20, 12 between 20 and 30, 15 between 30 and 40, 16 between 40 and 50, 18 between 50 and 60 and 22 deaths in the age period of 60 and upwards making a total of 157 in the Presidency as a whole.

Births.

6. The number of births recorded in previous years and the corresponding birth-rates are as follows :—

Year	Births	Birth-rate	Year	Births	Birth-rate
1901–10 mean ..	617,736	33·42	1921 ..	624,640	32·59
1911 ..	705,090	36·00	1922 ..	620,770	32·39
1912 ..	684,890	34·97	1923 ..	681,910	35·58
1913 ..	684,803	34·96	1924 ..	662,321	35·60
1914 ..	733,076	37·43	1925 ..	664,384	34·66
1915 ..	726,780	37·10	1926 ..	710,135	37·05
1916 ..	704,672	35·98	1927 ..	706,285	36·85
1917 ..	699,823	35·73	1928 ..	731,647	38·17
1918 ..	619,224	31·61	1929 ..	733,520	38·27
1919 ..	546,460	27·90	1930 ..	716,952	37·41
1920 ..	593,175	30·28			

The decrease as compared with the previous year is shared by three Registration Districts—Sind 10,872, Central 7,083 and Gujarat 2,775. The Western Registration District shows an increase of 1,650 and Southern 1,373 over the previous year while an increase of 1,139 occurred in Bombay City, over the previous year's figure 23,907.

7. The birth-rate for the year for the Presidency as a whole was 37·41 against 38·27 in the previous year. For the Presidency proper excluding Bombay City and Sind the rate was 42·20 against 42·66 in 1929. The rates recorded in other parts of India for the last two years are given below :—

	1930	*1929*		*1930*	*1929*
Madras ..	39·83	37·9	Bihar and Orissa ..	36·2	35·6
Bengal ..	26·60	29·26	United Provinces ..	37·31	34·33
Assam ..	31·35	32·77	Punjab ..	43·26	44·45
Burma ..	28·87	26·43	Central Provinces ..	47·74	43·96

It will be seen from the above table that there was an increase in the birth-rate throughout India with the exception of Bengal, Assam and Punjab.

Regarding the decrease in Sind, the Assistant Director of Public Health writes :—

"The decrease in the number of births is reported by all districts. The largest decrease is shown in Sukkur District (by 3,916) and the lowest in Karachi District (by 410). The actual cause of the decrease in births is attributable to low vitality due to abnormal sickness caused by floods in 1929 and 1930 and to economic depression. The three districts most affected by the floods of 1930 are Sukkur, Larkana and Nawabshah where the decrease is most noticeable.

A large number of villages in these districts were affected, several of them were actually submerged and others completely surrounded by water. Economic loss was very great. Crops in most cases were completely damaged. These three districts had also suffered in 1929 from floods and an epidemic of cholera and fulminant malaria. All these causes contributed to diminish the vitality of the people. In Thar and Parkar District the decrease is partly due to failure of crops successively during the previous four years and partly to famine conditions prevailing in the district during the year under report."

In the Central Registration District 194,020 births were recorded during the year under report as against 201,103 in 1929 showing a decrease of 7,083, but an increase of 12,782 over the decennial mean ending 1929 and of 12,173 over the decennial mean ending 1919. Out of the five Collectorates, Poona and Sholapur show an increase and the rest Ahmednagar, Satara and Ratnagiri show a decrease. Ratnagiri District shows the largest deficiency viz. 4,708 or 12 per cent. Ahmednagar and Satara show a deficiency of 1,945 or 5 per cent. and 1,890 or 4 per cent. respectively. The decrease in the number of births recorded in the Ahmednagar and Satara Districts may partly be attributed to the prevalence of cholera in the former and cholera and plague in the latter. The decrease in Ratnagiri may also be due to migration of population. The birth-rate for rural areas was 43·08 as against 44·99 in the previous year. The birth-rate for urban areas shows a marked increase from 29·20 in 1929 to 33·08 during the year under report.

In the Gujarat Registration District there is a decrease of 2,775 births as compared with the previous year. The birth-rate for the year under report was 39·54 showing a decrease of ·94 as compared with that of 40·48 for the last year. The birth-rate for the year under report shows an increase in Broach and Panch Mahals Districts by 1·44 and 1·12 respectively while Surat, Kaira and Ahmedabad Districts record decreases of 2·77, 1·77 and ·59 respectively.

As a result of the Civil Disobedience Movement many of the village officials who were mostly in close relationship with the resident population of the area affected had, owing to pressure in some instances or effect of the movement, resigned their posts which greatly set back the already unsuitable organisation in existence for the registration of vital statistics and as a result the births and deaths in such villages were not at all notified and recorded and in those villages where the village officials had not resigned the returns were sent blank to the Assistant Director's Office with remarks that the statistical figures could not be obtained owing to non-co-operation of the public.

Thus for the greater part of the year the compilation was defective. However, as soon as the movement was suspended and the normal conditions began to prevail, the birth and death returns were called for and the information received up to the 15th March 1931 was incorporated in the respective months and these final figures were taken as basis for the Annual Sanitary Forms and Report of the Gujarat Registration District. However, information of certain villages in Surat, Broach, Kaira and Ahmedabad Districts is still wanting.

In the Western Registration District the birth-rate for 1930 when compared with the previous year shows increase in all Districts except Thana and Kolaba which show slight decrease. There were 180,490 births showing an increase of 1,650 over the previous year's figure—178,840, the birth-rate being 45·30 against 44·89 in the last year.

In the Southern Registration District 131,258 births were registered during the year under report showing an increase of 1,373 over the figures recorded in 1929 and 9,537 over the average for the last decennium.

8. In the Presidency as a whole the birth-rate for rural areas was 38·89 and for urban areas 32·09 against 39·98 and 31·24 respectively in 1929. For the Presidency Proper excluding both Sind and Bombay City the rural birth-rate was 43·19 and the urban 36·21 against 44·01 and 34·53 respectively in 1929. Of the 27 districts in the Presidency the highest birth-rate was recorded in West Khandesh (54·97) and the lowest (17·56) in Sukkur. Twelve returned a birth-rate of 40 or more per mille of population, viz. Ahmednagar (53·04), Nasik (50·40), East Khandesh (49·55), Broach (46·85), Sholapur (46·52), Belgaum (42·43), Bijapur (42·09), Panch Mahals (41·55), Satara (41·42), Dharwar (40·87), Kolaba (40·67) and Ahmedabad (40·19). Six returned rates between 30 and 40 viz., Poona (39·46), Kanara (37·58), Surat (37·57), Kaira (36·57), Ratnagiri (34·35) and Thana (33·85) and the remaining six Sind Districts returned low rates under 30, viz., Karachi (29·88), Thar and Parkar (25·08), Nawabshah (22·36), Hyderabad (18·01), Larkana (17·91) and Upper Sind Frontier (17·62) and Bombay Suburban (22·74).

9. Of the 192 Talukas, Petas and Mahals in the Presidency Proper, 152 or as many as 79 per cent. returned rates over 35 per mille of population—37 of these areas yielding figures above 50, 86 areas, figures between 40 and 50 and 39 areas figures between 35 and 40, per mille. 19 returned rates between 30 and 35. The rates varied from 80·22 in Pathardi Peta in Ahmednagar and 74·13 in Sakri Taluka of the West Khandesh District to as low a figure as 15·89 in Poona City and 21·27 in South Salsette Taluka. Amongst others, showing low rates, the following nine talukas comprising 5 per cent. of the total returned birth-rates below 30 per mille of population, viz., Navalgund (29·42), Shahapur (29·36), Chorashi (27·38), Borsad (28·16), Yellapur (27·98), Malcompeth (26·89), Supa (25·89), Jalalpur (24·68) and Dascroi (23·69).

10. Out of 86 urban areas in the Presidency Proper, 22 returned birth-rates exceeding 40, viz., Borsad (60·60), Ahmedabad (52·51), Jambusar (52·36), Nandurbar (53·10), Dholka (50·50), Nasirabad (50·05), Umreth (48·91), Dhanduka (48·91), Ranebennur (48·46), Mehmedabad (48·27), Broach (46·38), Dhulia (44·64), Ahmednagar (44·54), Rander (44·37), Kapadwanj (43·73), Surat (42·69), Sholapur (42·66), Guledgud (42·00), Nadiad (42·20), Poona City (40·61), Ankleshwar (40·06), Erandol (40·04). 26 towns recorded birth-rates between 30 and 40 per mille of population and 27 showed rates between 20 and 30. In the remaining 11 towns the recorded birth-rates were under 20, viz., Karad (19·64), Lonavla (19·58), Igatpuri (18·54), Thana (18·40), Bassein (18·43), Manmad (18·29), Satara (18·04), Mahad (17·80), Yawal (13·59), Uran (10·94) and Poona Suburban (7·94).

Inefficient registration seems to be the cause of the inordinately low rates recorded in the last 11 Municipalities.

In spite of the fact that Assistant Directors repeatedly bring the defective registration of births to the notice of the Municipalities of the towns they inspect and suggest means for improving the system of registration, no attempt appears to have been made by any mofussil Municipality in the Presidency for carrying out these recommendations.

Registration of vital statistics forms the basis of Public Health activities. Unless Municipalities realise this fact and pay greater attention to it, the correct appreciation of their endeavours either to improve sanitation or increase the average duration of life cannot be realised.

The births recorded in Bombay City were 25,046 or 1,139 more than in the previous year equivalent to a birth-rate of 21·80 an increase of ·99.

11. The birth-rate for the Province of Sind was 21·24 against 24·57 in 1929. The birth-rate for rural areas was 18·14 and for urban areas 38·52 as against 21·54 and 41·47 respectively in the previous year. As usual the urban birth-rate this year also greatly exceeds the rural rate in contrast to the Presidency proper where the reverse is invariably the case.

Of the 61 Talukas and Mahals in Sind 5 or 8 per cent. returned birth-rates above 30 per 1,000 of population, viz. Diplo (46·37), Mithi (36·10), Shahdadkote (25·95), Chachro (33·36) and Nawabshah (30·21). Fourteen Talukas or 23 per cent. returned birth-rates between 20 and 30. 40 Talukas or 66 per cent. between 10 and 20 and 2 or 3 per cent. returned rates below 10 per mille of population.

The efficiency in registration in the urban circles of Sind varies. Of the 19 town circles, two recorded birth-rates over 40 per mille of population, viz. Karachi (54·47) and Hyderabad (40·23). Eight recorded birth-rates between 20 and 35 and the remaining 9 towns between 10 and 20. These are Umarkot (19·76), Halla (19·28), Matiari (17·88), Mirpurkhas (16·65), Nawabshah (15·87), Tatta (15·23), Sehwan (13·78), Kotri (12·34) and Jacobabad (10·59). These municipal towns have been constantly

figuring in previous annual reports as showing defective registration and the reasons for the default have also been pointed out.

12. *Births in Cantonments.*—Of the 9 Cantonments, Karachi (40·91), Nagar (26·46), Kirkee (26·40), Ahmedabad (16·04), and Belgaum (12·79) show the highest rates, while the lowest rates were recorded in Poona (8·94), Hyderabad (8·50), Deolali (2·14) and Santacruz (1·06).

13. *Births according to sex.*—Out of 716,952 births, 372,205 were males and 344,747 females equal to ratios of 19·42 and 17·99 per mille of population as compared with 380,731 and 352,789 and 19·86 and 18·41 in 1929. For every 100 female births there were 107·96 male births the previous year's figure being 107·92. The percentage of male to female births varied from 102·09 in Dharwar District to 138·68 in Upper Sind Frontier. The proportion of male to female births is high throughout Sind.

14. *Still-births.*—11,428 still-births were registered or 1·59 for every 100 live-births. The percentage of still-births to live-births recorded varied from ·09 for the Thar and Parkar District to 7·98 for the City of Bombay. For other areas, Kanara (4·50), Dharwar (3·54), Kolaba (3·30), Bijapur (2·96), Belgaum (2·59), Surat (2·25) and Sukkur (2·01) show the highest percentages.

15. In the Southern Registration District omissions of 563 births and 81 deaths were discovered during the year under report by the Inspectors of Sanitation and Vaccination and Vaccinators against 726 and 104 in the previous year. The omissions of 1,129 births and 2 deaths were detected in the Central Registration District against 446 births in 1929; of 223 births and 21 deaths in Gujarat Registration District against 268 and 20 respectively in the previous year.

Deaths.

16. The year under report shows a small decrease in mortality as compared with the previous year, but an increase when compared with the quinquennial mean. The decrease as compared with the previous year is mainly under the disease headings Fevers and Plague, while there is a noticeable increase under Cholera and Small-pox.

The total number of deaths registered was 566,003 as compared with 585,046 in 1929 and 520,330 the quinquennial mean. Comparison is shown in graphic form at the beginning of this section. The totals for previous years are given in the following table :—

Years	Deaths	Years	Deaths
1901–1910 mean ..	639,483	1923	496,244
1911–1915 mean ..	539,836	1924	529,576
1916	652,584	1925	453,563
1917	798,406	1926	547,064
1918	1,724,074	1927	492,891
1919	637,170	1928	522,885
1920	516,296	1929	585,046
1921	498,350	1930	566,003
1922	452,581		

17. The recorded death-rate for the whole Presidency works out to 29·53. The death-rate in 1929 was 30·53, the quinquennial mean being 27·15.

For the other parts of India the death-rates recorded are as under :—

	1930[1]	1929		1930	1929
Madras ..	25·52	25·3	Bihar and Orissa ..	29·6	26·09
Bengal ..	22·44	23·52	Punjab ..	29·66	26·75
Assam ..	21·40	20·91	United Provinces ..	27·20	24·26
Burma ..	20·82	22·06	Central Provinces ..	37·76	34·13

It will be seen from the above table that there was an increase in the death-rate throughout India with the exception of Bengal and Burma.

Excluding Bombay City and Sind, the death-rate for the Presidency was 32·52 against 32·05 in 1929. The death-rates for rural and urban areas for the presidency as a whole were 29·43 and 29·96 respectively against 30·46 and 30·79 in 1929.

Deaths by Registration Districts.—The decrease in the number of deaths as compared with the previous year is shared by two Registration Districts. Sind 27,115 and Southern 13,302, while the Western Registration District shows an increase of 10,541, Central 4,908 and Gujarat 4,896 over the previous year. Bombay City shows an increase of 1,029 over the previous year's figure—26,306.

Of the districts, the highest death-rates were returned by West Khandesh (41·99), East Khandesh (40·73), Broach (40·26), Sholapur (39·90), Nasik (35·09), Satara (35·08), Ahmednagar (35·03), Ahmedabad (33·35), Poona (32·36), Bijapur (32·36), Kaira (31·39), Surat (31·05), Panch Mahals (30·86) and Kolaba (30·70). The high death-rate in East and West Khandesh, Nasik and Poona was chiefly due to Cholera and Small-pox, while in the Districts of Ahmednagar, Sholapur, Satara and Bijapur Cholera was responsible for the high death-rate and in Broach small-pox.

18. Of the 192 talukas, petas and mahals in the Presidency Proper, 31 as compared with 28 in the previous year show death-rates exceeding 40 per mile of population. These are Pathardi (56·00), Shevgaon (55·41), Karjat (52·25), Mundgod (51·58), Shirpur (50·32), Bhusawal (48·05), Erandol (47·74), Jalgaon (47·02), Jamner (47·64), Ambernath (47·07), Sakri (47·82), Hansot (46·78), Shahada (46·64), Man (45·98), Ankleshwar (45·84), Edlabad (45·30), Newasa (45·15), Nandurbar (44·99), Chalisgaon (43·87), Nandgaon (43·74), Pachora (43·73), Broach (43·62), Karmala (43·57), Wagra (42·99), Khanapur (42·21), Sinnar (41·82), Sindkheda (41·43), Indi (40·62), Sholapur (40·56), Dhulia (40·50) and Barsi (40·13). Thirty-two returned rates between 35 and 40, viz. Jamkhed (39·96), Yeola (39·77), Chopda (39·63), Khatav (39·56), Malsiras (39·45), Amalner (39·18), Koregaon (39·07), Uran (38·54), Bhadgaon (38·54), Sangamner (38·16), Parola (38·06), Nasik (37·82), Yawal (37·45), Indapur (37·29), Raver (37·07), Malegaon (36·89), Chandor (36·81) Wai (36·74), Amod (36·55), Baglan (36·59), Taloda (36·35), Bankapur (36·32), Wada (36·13), Satara (36·09), Nawapur (36·06), Olpad (35·80), Jambusar (35·78), Kalol (35·96), Kalwan (35·60), Niphad (35·59), Pandharpur (35·57) and Mandvi

(35·30). Sixty-one returned rates between 20 and 30 and the remaining 3 returned rates below 20.

19. For urban areas, death-rates varied between 57·59 for Nasirabad town and 10·29 for Yawal. Out of 86 urban registration circles in the Presidency proper fifteen returned death-rates over 40 per mille of population, viz. Nasirabad (57·59), Pandharpur (55·06), Ahmedabad (49·53), Ilkal (50·69), Poona City (46·80), Dakore (45·43), Sholapur (45·05), Barsi (44·53), Surat (44·18), Borsad (43·75), Mehmedabad (42·82), Umreth (42·56), Ankleshwar (42·02), Nadiad (41·26) and Gadag Bettigiri (40·21). Twenty-two returned rates between 30 and 40, viz. Dharangaon (39·12), Baramati (37·97), Erandol (37·55), Viramgaon (37·41), Kapadwanj (37·38), Guledgud (37·20), Nandurbar (36·84), Bagalkot (35·75), Dholka (35·48), Jambusar (35·23), Nasik (35·07), Dohad (34·91), Bhiwandi (34·38), Broach (34·00), Dhanduka (33·89), Yeola (33·42), Satara (32·02), Chalisgaon (31·53), Parola (31·46), Belgaum (31·11), Chiplun (30·80) and Dhulia (30·04). Twenty-eight recorded rates between 20 and 30 and the remaining 21 returned rates below 20.

20. *Corrected Death-rates.*—The following table gives the death-rates in accordance with age and sex distribution for the Presidency proper and for the six towns for which such correction is possible :—

	Standard death-rate	Factor for correction	Recorded death-rate	Corrected death-rate
Presidency excluding Bombay and Sind	39·8	1·0	32·52	32·52
Ahmedabad	37·6	1·06	49·53	52·50
Bombay City	28·6	1·39	29·53	41·05
Poona	37·0	1·08	46·80	50·54
Sholapur	39·4	1·01	45·05	45·50
Surat	39·0	1·02	44·18	45·06
Karachi	38·5	1·03	29·35	30·23

21. The birth and death returns of the chief cities may be briefly noted on as follows :—

Bombay.—Population 1,148,815. 25,046 births were registered equal to a birth-rate of 21·80 as compared with 23·907 and 20·81 in the previous year. The registered deaths amounted to 27,335 as against 26,306 in 1929. The death-rate per mille of population was 23·79 against 22·90 in 1929. The number of infantile deaths was 7,472 equal to a ratio of 298·33 per 1,000 registered births as against a rate of 300·66 in 1929. The chief causes of death shown in the returns were small-pox, respiratory diseases and all other causes. Pneumonia was as usual more prevalent in the city during the year under report. Cholera caused 40 deaths, Plague 20, while Influenza was responsible for 75 deaths.

Ahmedabad.—Population 270·899. The number of births registered was 14,209 equal to a birth-rate of 52·51 as against 12,724 and 47·02 respectively in 1929. The registered deaths were 13,404 corresponding

to a death-rate of 49·53 as compared with 13,503 and 49·90 respectively in the previous year. The number of infantile deaths was 5,061 equal to a ratio of 356·18 per 1,000 registered births as against a rate of 331·65 in the preceeding year. The chief causes of death shown in the returns were small-pox, fevers, respiratory diseases and all other causes.

Poona.—Population 133,122. Births registered were 5,406 equal to a birth-rate of 40·61 as against 4,780 and 35·91 respectively in the previous year. The total deaths registered amounted to 6,211 equal to a death-rate of 46·80 as compared with 5,450 and 40·94 respectively in 1929. The chief causes of deaths shown in the returns were small-pox, fevers, respiratory diseases and all other causes. 94 deaths from enteric fever were recorded. Pneumonia and Phthisis reported 621 and 481 deaths equal to a ratio of 4·67 and 3·62 respectively per 1,000 of population. The number of infantile deaths was 1897 or a ratio of 350·90 per 1,000 registered births as against a rate of 342·90 in the previous year. The infant mortality rate of this city is shown always as abnormally high mainly owing to defective registration of births. After numerous representations on the subject the Municipality are now taking steps to secure more accurate registration of births. The birth-rate (40·61), during the year under report and (35·91) during the previous year show marked increase as compared to previous years. It is hoped that the Municipality will continue its efforts and show progressive improvement.

Karachi.—Population 199,014. The total number of births registered were 10,840 equal to a birth-rate of 54·47 against 11,121 and 55·83 respectively in the previous year. 5,850 deaths were registered showing a decrease of 2,107 over the previous year's figure—7,957. The death-rate was 29·35 against 39·97 in 1929 and 31·89 the mean of previous five years. Respiratory diseases and all other causes were among the chief causes of death. 32 deaths from Enteric fever were registered. Pneumonia recorded 1,155 deaths equal to a ratio of 5·80. 542 deaths from Phthisis were registered equal to a ratio of 2·72. The infant mortality rate per 1,000 registered births shows a decrease from 230·55 to 193·42.

Surat.—Population 1,17,428. There were 5,013 births recorded as against 4,515 in 1929. The birth-rate shows an increase from 38·45 to 42·69. The total deaths recorded were, 5,188 equal to a death-rate of 44·18 compared with 4,778 and 40·69 respectively in 1929. Small-pox was more prevalent in the city and caused 644 deaths equal to a ratio of 5·48 per mille of population. Measles caused 101 deaths or a ratio of ·86 during the year under report. 511 deaths from Malaria were recorded equal to a ratio of 4·35. Pneumonia was responsible for 737 deaths equal to a ratio of 6·28 per mille of population. Out of these deaths, 376 occurred under one year and 181 between 1 and 5 years of age. The number of infantile deaths was 1,857 or a ratio of 370·43 per 1,000 registered births as against a rate of 364·12 in 1929.

Sholapur.—Population 119,347. 5,092 births were registered equal to a birth-rate of 42·66 as compared with 5,255 and 44·03 respectively

in 1929. The general health of the city as measured by the mortality rates was not so satisfactory as that of the previous year. The total deaths from all causes rose from 4,598 equal to a death-rate of 38·53 in 1929 to 5,376 and 45·05 respectively in 1930. The chief causes of death shown in the returns were Cholera, fevers and all other causes. Measles showed an increase from 165 deaths in 1929 to 334 in the year under report. The infant mortality rate per 1,000 registered births fell from 228·73 in 1929 to 212·10 during the year under report.

22. *Death-rate in Sind.*—58,751 deaths were registered as against 85,866 in 1929 and 56,020 the decennial mean. The recorded death-rate for the whole Province works out to 18·01 against 26·33 in 1929 and 17·18 the decennial mean. By Districts the highest death-rate (23·64) was recorded in Sukkur and the lowest (14·04) in Hyderabad. All the districts show a lower death-rate than that of previous year and also the mean of previous five years except Sukkur and Upper Sind Frontier District which show a higher death-rate than their mean. The decrease in all the districts is partly due to a low birth-rate in all the districts during the year under report; but the chief cause of the decrease in deaths during the year was that there were less number of deaths from fevers (19,155) compared with last year and the absence of Cholera which caused 6,411 deaths during the previous year. The conditions prevalent at the time of floods in Sind were bound to adversely affect the general health conditions of the people and considerable amount of sickness was expected but prompt measures were adopted by the Assistant Director of Public Health from the very beginning and the health conditions of the Province were carefully watched with the result that no unusual sickness was reported from any part of Sind. The prompt action taken by the Assistant Director of Public Health was highly appreciated by the public at large and appreciating references were made in the local papers of Karachi and Sind.

The urban (27·61) greatly exceeds the rural death rate (16·29) as in previous years and can be attributed to faulty registration in rural areas. The urban death-rate ranged between 11·64 for Halla and 33·29 for Shikarpur and the rural death-rate between 9·03 for Saughar and 32·50 for Sukkur taluka. Of the 61 talukas and mahals in Sind, 16 returned death-rates above 20 per 1,000 of population, 43 between 10 and 20 and 2 below 10 per mille of population. Out of 19 urban circles in Sind, ten recorded rates above 20 per mille of population, viz. Shikarpur (33·29), Rohri (33·13), Larkana (31·58), Hyderabad (30·52), Garhiyasin (29·64), Karachi (29·35), Ratodero (29·38), Sukkur (26·01), Umarkot (22·86) and Kambar (20·89), and the remaining 9 returned rates below 20.

23. *Death-rate in Cantonments.*—The lowest death-rate (·21) was recorded in Santacruz while Kirkee headed the list 29·78 (as compared with 25·40 in the previous year). Respiratory diseases in the latter Cantonment were responsible for 65 deaths equal to a ratio of 8·12 per mille of population. Of these, 28 were due to Pneumonia, 16 to Phthisis and 21 to other respiratory diseases. The death-rates recorded in other

Cantonments were Ahmedabad (26·93), Nagar (20·19), Karachi (13·84), Belgaum (13·23), Poona (11·29), Hyderabad (6·65) and Deolali (6·17).

24. *Births versus Deaths.*—Over the Presidency as a whole births exceeded deaths by 150,949 or a "natural increase" of ·78 per cent. on the population compared with ·77 per cent. for the year previous. In the Presidency excluding Sind and Bombay City, the percentage of natural increase amounts to ·97 as against 1·05 for 1929. For Sind the figure is ·32. In Bombay City, on the other hand, deaths exceeded births by 2,289 or ·20 per cent. of the population. Further details are given in columns 6 and 9 of Annual Form No. II.

25. *Mortality according to sex.*—291,519 male and 274,484 female deaths were recorded giving death ratios per 1,000 of each sex of 29·01 and 30·11 respectively, against 29·83 and 31·29 for 1929. For every 100 females 106·21 males died as compared with 105·01 in 1929. In Sind the ratio of male to female deaths during the year was 127·85 to 100 as compared with 115·99 for 1929. In Bombay City the figure was 119·49 to 100 as compared with 121·10 in 1929.

Infant Mortality.

26. There were 134,170 deaths under twelve months corresponding to a ratio of 187·14 per 1,000 registered births as against 138,602 or a ratio of 188·95 in 1929. The male and female rates were 194·78 and 178·89 respectively, as compared with 196·45 and 180·87 in the previous year.

Infant mortality 1930, compared with previous years.

Year	Deaths under 12 months			Births registered			Infant death-rate per 1,000 births			Infant deaths per 100 of total deaths
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
1930 ..	72,497	61,673	134,170	372,205	344,747	716,952	194·78	178·89	187·14	24·06
1929 ..	74,793	63,809	138,602	379,817	351,997	731,814	196·92	181·27	189·39	23·69
1928 ..	71,611	60,302	131,913	380,159	351,488	731,647	188·37	171·56	180·30	25·23
1927 ..	61,564	52,445	114,009	366,694	339,591	706,285	167·89	154·43	161·42	23·13
1926 ..	75,030	63,183	138,213	368,823	341,312	710,135	203·43	185·12	194·63	25·25
1925 ..	58,083	49,551	107,634	346,373	318,011	664,384	167·69	155·81	162·01	23·73
1924 ..	70,480	59,950	130,430	353,631	327,690	682,321	198·77	182·95	191·17	24·63
1923 ..	59,228	49,684	108,912	354,890	327,020	681,910	166·89	151·93	159·76	21·95
1922 ..	57,130	47,841	104,971	323,631	297,139	620,770	176·53	161·01	169·10	23·19
1921 ..	60,231	51,023	111,254	325,751	298,889	624,640	184·90	170·71	178·11	22·32
1920 ..	59,236	49,440	108,676	309,463	283,712	593,175	191·42	174·26	183·21	19·36
1919 ..	58,950	51,398	110,348	285,195	261,265	546,460	206·70	196·73	201·93	17·32
1918 ..	94,553	83,124	177,677	322,546	296,678	619,224	293·14	280·17	286·93	10·32
1917 ..	79,984	71,649	151,633	363,460	336,362	699,822	220·06	213·01	216·67	18·99
1916 ..	75,328	65,304	140,632	365,057	339,615	704,672	206·34	192·29	199·57	21·58
1915 ..	67,440	57,569	125,009	376,980	349,850	726,780	178·92	164·55	172·00	24·43

Of the infants who died, 49,306 were in their first month of life (27,283 under and 22,023 over one week) 50,367 over one month but not exceeding six months and the remainder 34,497 between six and twelve months. The percentage of total infant mortality under each of these three sub-groups works out to 36·75, 37·54 and 25·71 as compared with 36·96, 35·70 and 27·24 respectively in 1929.

The details of the average hundred infant deaths in each Registration District are given in the following table :—

	Infantile deaths				
	In every 100 total deaths	Per 1,000 registered births	Not exceeding one month	1–6 months	6–12 months
Western ..	25·93	198·14	36·74	38·04	25·22
Central ..	22·66	177·11	36·02	40·35	23·63
Southern ..	21·87	155·50	44·46	35·11	20·43
Gujarat ..	26·60	220·35	30·35	39·23	30·42
Sind ..	17·66	149·48	41·95	33·05	25·00
Bombay ..	27·33	298·33	33·97	29·20	36·83
Presidency ..	24·06	187·14	36·75	37·54	25·71

From the above table it will be seen that the mortality amongst infants in the Southern and Sind Registration Districts was greatest in the first month of life, while in the Western, Central and Gujarat Registration Districts it was highest between the age period of 1–6 months. Throughout the Presidency except Bombay City it was lowest between 6–12 months.

For the other parts of India the infantile death-rates are as under :—

	Infantile deaths per 1,000 registered births			Infantile deaths per 1,000 registered births	
	1930	*1929*		*1930*	*1929*
Madras ..	185·68	180·04	Bihar and Orissa ..	137·8	135·00
Bengal ..	187·30	179·87	Punjab ..	185·73	186·20
Assam ..	174·44	157·44	United Provinces ..	170·79	168·61
Burma ..	202·26	225·97	Central Provinces ..	241·82	240·49

From the above table it will be seen that the highest infantile death-rate per 1,000 registered births was recorded in the Central Provinces (241·82) and the lowest (137·8) in Bihar and Orissa.

The urban and rural infantile death-rates per 1,000 registered births for the Presidency as a whole were 256·43 and 173·19 respectively, as compared with 261·50 and 175·91 in the previous year. The highest rural infantile death-rate was recorded in Broach (246·45) and the

DEATH RATE AT EACH AGE PERIOD.

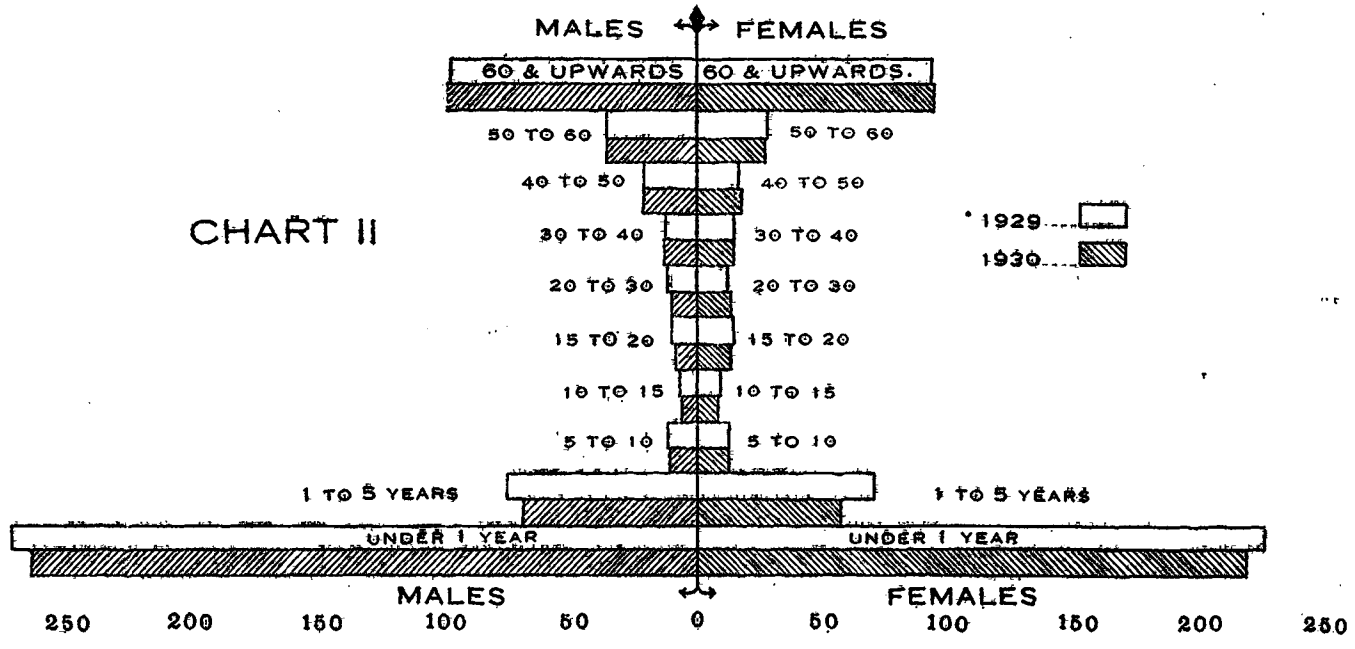


CHART II

1929
1930

lowest in Nawabshah (93·12). Among the larger towns the following recorded the highest rates :—

Dakore (432), Pandharpur (421), Barsi (407), Satara (380), Surat (370), Viramgaum (366), Ahmedabad (356), Poona (350), Nadiad (308), Nasik (292), Shikarpur (279), Bhusawal (261), Thana (257), Kurla (248), Godhra (245), Jalgaon (243), Larkana (236), Hyderabad (229), Sholapur (212), Sukkur (208), Broach (200), Karachi (193), Dhulia (187) and Belgaum (185).

Detailed figures are given in Annual Form No. VI (*a*).

The Assistant Director of Public Health, Southern Registration District, writes :—

"*Action taken to reduce infant mortality.*—Fifteen qualified midwives were entertained by 11 Municipalities in the Division. They advised pregnant women on the importance of preserving their health and explained to them the dangers of allowing untrained midwives to attend the maternity cases. In addition to these midwives 8 were entertained by the Dharwar Red Cross Society during the year and they were attached to Taluka Dispensaries. The midwives entertained by Municipalities of Saundatti, Bail-Hongal, Nargund, Ranebennur, Gadag and Guledgud were asked to work in dispensaries and to attend the female wards.

The Belgaum Branch of the Red Cross Society has been doing good work through the Infant Welfare Centre started by them in the year 1928.

713 confinements were attended to by 22 midwives in the Southern Registration District against 710 and 24 respectively in 1929.

Two Baby Week shows were held in rural areas of the Dharwar District by the Divisional Honorary Secretary of the Provincial Baby Week Committee. The travelling dispensary medical officer entertained by the Belgaum Red Cross Society carried on propaganda work on Public Health with the aid of Magic Lantern lectures in different centres of each taluka. Similar lectures on small-pox and plague etc., were delivered by the Inspector of Sanitation and Vaccination in Kumta town and taluka of the Kanara District with the help of the President of the Municipality and the Mamlatdar of the Taluka."

The Assistant Director of Public Health, Sind Registration District, reports :—

"All the districts have shown lower infant mortality rates except Thar and Parkar as compared with the preceding year. Among towns, Rohri showed the highest infant mortality rate (300·43) and Karachi the lowest (193·42). All the towns show lower mortality rates than the preceding year. There is no Hospital, Maternity Home or Health Association in Rohri town. For a town of the size and importance of Rohri it is very necessary to have a maternity home and a trained health visitor to pay house to house visits. The Municipality has been advised to appoint at least one trained nurse. Shikarpur town shows much improvement in the infantile death-rate—456·28 in 1929 to 279·69 in 1930. During the year under review, 370 cases were conducted in Sitaldas Tirathdas Maternity Home, Shikarpur, as against 461 in the preceding year. In Larkana town 154 maternity cases were attended by Maternity Home Lady Doctor in Mrs. Hamid Ali Red Cross Home, Larkana, as against 118 in the preceding year. Karachi City shows the lowest infant mortality rate due to the activities of Health Association midwives. 1,053 maternity cases as compared with 851 in 1929 were conducted by the six midwives.

The Health Officer, Hyderabad Municipality, says that the high infant mortality was chiefly due to Broncho-Pneumonia. In order to reduce the infant mortality, Miss A. Jones, Lady Health Visitor, carried on her work during the year under report, of house visiting and particularly of visiting mothers before and soon after delivery. During the year under report 2,651 house visits were made by Lady Health Visitors in different wards of the City. 486 labour cases in all were conducted. In order to further reduce infant mortality, Magic Lantern lectures were organised in different parts of the City in order to educate ladies, girls and children and lectures on Hygiene, infant and maternal mortality etc., were given by the Health Officer and the Medical Officer in charge Tubercular Dispensary."

27. The following is a brief extract from the section that deals with infant mortality in the Annual Report of the Executive Health Officer, Bombay Municipality :—

"*Bombay City.*—The deaths among infants under one year of age numbered 7,506 being 281 more than in the preceding year but 1,157 less than the annual average in the decennium 1920–1929.

The infant mortality rate expressed as the number of deaths in infants per 1,000 registered births was 296, being the lowest hitherto recorded in the official statistics for the City. The next lowest rate was 298 registered in 1929.

Causes of death.—It will be seen that 5,320 or nearly 71 per cent. of the total deaths in infants were due to diseases of the Respiratory System, infantile debility and premature birth, against 5,302 deaths or 73 per cent. in 1929. Diarrhœa and enteritis caused 350 deaths, malaria, ague and remittent fever 143 deaths, fever not defined 73 deaths and convulsions 626 deaths. The deaths from small-pox and measles numbered 449 and 41 respectively.

Quinquennial averages.—Compared with the averages of the preceding five years, the total number of deaths was more by 114, the principal increases in the mortality being 308 under small-pox, 6 under measles, 65 under ague and remittent fever and fever not defined, 8 under dysentery and 110 under diseases of the respiratory system. Decreases were recorded under malarial fever (8), diarrhœa and enteritis (25), infantile debility and premature birth (373) and convulsions (54).

Of the total deaths among infants, 1,575 or 21 per cent. took place in the first week of life and 972 or 13 per cent. in the age-period of 1 to 4 weeks.

The mortality among infants who had not completed the first month of life was thus 2,547 or 34 per cent. of the total infant deaths. The number of deaths in the groups 4 weeks to 6 months and 6 and 12 months was 2,193 and 2,766, being respectively 29 and 37 per cent. of the total infant mortality.

The salient features are the magnitude of the role played by debility and prematurity in the causation of deaths in the first 4 weeks of life and the large proportion of deaths from respiratory diseases during the remaining 11 months of infancy.

Infant Mortality by Races.—Infant mortality among the principal castes are Hindus all other castes 315, Hindus low caste 321, Mussalmans 291, Parsees 99, Jews 108, Indian Christians 283, Anglo-Indians 180 and Europeans 53.

In the case of each death of an infant special enquiries were made by the District Registration staff of the Health Department as to whether the birth of the child had taken place in the City or outside it, and if the former whether the birth was registered in the City registers before or after death. The result of this enquiry is embodied in the following table with a view to ascertain the incidence of infant mortality in a class of population inhabiting a particular locality :—

——	Bombay born		Born out of Bombay	Total
	Registered			
	Before death	After death		
	5,981	275	1,250	7,506
Percentage ..	79·7	3·7	16·6	100·0

As this information is introduced since the year under report it is not fair to offer any comments on the figures. For instance, the percentage of deaths amongst children born in the mofussil and not registered in the City to the total infant deaths in 1930. was 17 as against about 32 in 1927. This striking variation may be due to the material benefits extended to the labour class, the extended facilities by the increased number of Maternity Homes or to some other facts.

The percentage of population occupying tenements of one room and under to the total number of occupants of all classes of tenements in the City by the Census of 1921 was 66. Of the 25,329 births registered in the year, 10,945 or 43 per cent. occurred in families living alone in a single room or sharing it with others and the number of deaths in infants in this class of population was 5,497 or 73 per cent. of the total infant mortality.

It will be observed from the statement that the rate of deaths among infants in single room tenements per 1,000 births in such tenements during the year was 502 as against 487 in 1929, and that the proportion of deaths to births varies inversely as the number of rooms occupied by the parents. For 2-room residences the figure is 306 ; 3 rooms 270 ; and 5 or more rooms 183 ; and for Hospitals 101.

Prevention of Infantile Mortality.—The work which is being done in Bombay for the reduction of infant mortality may be described under the following heads :-

(1) Visits by the Municipal District Nurses for the purpose of getting into touch with prospective mothers and for discovering cases of sickness especially among women and children and unvaccinated children ; for enquiry into the condition of new born infants ; and for giving instruction by homely talks as to the care and rearing of children.

(2) Attendance on confinements.

(3) Provision of necessaries and comforts during the lying-in period.

(4) Maternity Homes.

(5) Infant Welfare Centres and Infant Milk Depots.

Municipal Nurses.—The number of Municipal Nurses employed is ten, one being attached to each of the ten District Registrar's offices. They are all qualified midwives and visit daily the localities and chawls inhabited by the poor and help them. The visits of the nurses are frequently the means of bringing to the municipal dispensaries sick persons who would otherwise either not know the existence of facilities provided or knowing would through indifference and stupidity, neglect to benefit by them. These visits are doing much good and are welcomed and appreciated by those for whose benefit they are paid.

Summary of work.—During the year the municipal nurses paid 30,482 visits to homes, chawls and huts (against 37,948 in 1929) inquired into 2,911 cases of ordinary sickness and reported 209 cases of infectious diseases and 469 deaths in the female population of the City. They also attended on 1,245 confinements (against 1,087 in 1929) and verified the reports of the Birth Karkuns on 6,659 births.

It will be seen that of the total number of 27,342 births (including 2,013 still-births) registered in the City during the year under report, 10,320 or 38 per cent. were verified by the municipal nurses as against 10,075 or 39 per cent. in 1929.

The proportion of births wholly unattended was 4 per cent. among the cases wherein enquiries were made, and that of confinements attended by unskilled women 29, as against 4 and 35 respectively in 1929.

The percentage of confinements attended by qualified midwives (other than municipal) was 9 as in 1929 and that of confinements attended by municipal midwives was 12 as against 11 in the previous year. The percentage of children born in Hospitals showed an increase from 41 to 45 per cent.

The percentage of children born in healthy condition was 69 as against 65 in the preceding year and that of children fed on breast was 71 as against 68 in 1929.

The proportion of children dying within 30 days of birth fell from 8·6 in 1929 to 8·3 in 1930.

The percentage of mothers who left home for work leaving their children to the care of others was 30 as in 1929.

Relief to poor women during confinement in the shape of necessaries and comforts such as milk, bread, bed, blankets, charpoys and linen was continued during the year and dispensed in 317 cases against 271 in 1929 and 362 in 1928.

The total number of women admitted to the four Municipal Maternity Homes during the year was thus 3,361 as against 3,051 in 1929. The number of cases confined in the Homes was 2,917 as against 2,751 in 1929. Of the women confined, 684 were primiparae.

The number of confinement cases in each of the municipal and private Institutions doing maternity work during the year under report was 16,291 as against 14,225 in 1929.

Maternal Mortality.—The number of deaths of mothers during Puerperal stage from different causes during 1930 was 189 as against 197 in 1929.

Voluntary Welfare Centres.—The Maternity and Child Welfare Scheme of the Infant Welfare Society has done good work. At the end of the year the centres established numbered nine. The Society provides through them (1) advice and instruction to mothers as to infant management, (2) medical aid to infants, and (3) a staff of trained nurses for visiting the homes of infants. Each centre is in charge of a Supervisor who is a trained nurse and a midwife. She supervises the milk distribution and assists the

Lady Doctor in charge in attending on babies and advising mothers on infant management. There is also a Health Visitor who is a trained nurse and midwife attached to each centre. She visits the babies in the district and persuades their mothers to take advantage of the Infant Welfare Scheme.

During the year 9,229 seers of milk were given free, 5,933 seers of milk were sold at 1 anna a seer, 45,452 seers at 2 annas a seer and 5,981 seers at 3 to 4 annas a seer. The number of new admissions at the nine Centres was 5,112 and that of attendances for milk, medicine, treatment and advice 407,414.

The number of confinements attended by Midwives of the Society was 1,295.

A crèche is attached to the DeLisle Road Centre when the highest daily attendance was 72."

28. Deaths by Castes or Classes and by sex are recorded in Annual Form No. V, Appendix III.

29. *Deaths according to Causes.*—The following table shows the number of deaths in 1930 and the ratio per 1,000 of population arranged according to causes and contrasted with the figures for 1929 and with the mean for the preceding five years :—

Causes	1930		1929		Mean for five years	
	No.	Ratio	No.	Ratio	No.	Ratio
Cholera	15,142	·79	9,084	·47	8,450	·44
Small-pox	21,341	1·11	10,635	·56	6,111	·32
Plague	5,026	·26	18,014	·94	11,624	·61
Fevers	223,274	11·65	246,428	12·86	209,112	10·91
Dysentery and Diarrhœa ..	26,536	1·39	25,108	1·31	25,745	1·34
Respiratory Diseases ..	99,678	5·20	99,896	5·21	94,274	4·92
Injuries	7,645	·40	8,277	·43	7,907	·41
Other Causes	167,361	8·73	167,604	8·75	157,107	8·20
All Causes	566,003	29·53	585,046	30·53	520,330	27·15

From the above table it will be seen that there is a decrease in mortality under plague, fevers and injuries as compared with the previous year, while there is an increase under cholera, small-pox, and dysentery and diarrhœa. The number of deaths from respiratory diseases and all other causes is practically the same as last year. Comparing the figures with those of the mean of previous five years there was an increase in mortality practically under all the headings except plague.

Contrast graphs of the monthly incidence of deaths under the Chief Causes for the year under report compared with previous years are shown in Chart III. Also graphs of annual incidence of deaths under the chief epidemic diseases Cholera, Small-pox and Plague are shown in Chart IV.

Comments on the causes of death are made in Section VI.

30. *Cantonments in Indian States.*—The vital statistics of the Cantonments of Nasirabad, Neemuch, Mhow, Deesa and Rajkot have been omitted from this Report, *vide* Government Memorandum, General

Department, No. 7402-D of 20th February 1929. The vital statistics of Baroda and Aden only are shown below :—

Baroda.—Population 2,934. The total number of births registered were 22, giving a ratio of 7·50 per 1,000 of population against 25 and 8·52 respectively in 1929. The total deaths registered amounted to 21 equal to a death-rate of 7·15 against 29 and 9·88 respectively in the previous year. Fever caused 15 deaths, dysentery and diarrhoea 1 and all other causes 5.

Aden Settlement.—Population 44,650. The total number of births registered were 1,037 equal to a birth-rate of 23·23 per mille of population as compared with 815 and 18·52, respectively, in the previous year. The registered deaths were 1,608 corresponding to a death-rate of 36·01 per mille of population as against 1,939 and 44·07 respectively in 1929. Fever caused 228 deaths. Dysentery and diarrhoea 369, respiratory diseases 499, injuries 6 and all other causes 506. No deaths from epidemic diseases were reported during the year under report.

31. *Rainfall.*—Good rains were received in the Presidency proper in June except in the districts of Ahmednagar, Sholapur, Satara and some portion of the Karnatak. In July the rainfall was sufficient except in the Southest Deccan and Karnatak while in August it was generally deficient throughout the report ng area. In the beginning of September ample rains were received but towards the end of it more rain was desired in parts of Konkan, Gujarat and Karnatak. In October the rains were almost satisfactory except in Gujarat. There was very little rain in Sind in general.

Sind.—The monsoon season of 1930 in Sind was characterised by an unusually early and abnormal rise of the river Indus which in some districts of North and middle Sind gave rise to serious floods, causing much damage to crops and property. In North Sind, the areas round Shikarpur and Larkana were chiefly affected by the floods and part of Nawabshah district also suffered severely on this account. On the whole the rainfall was scanty.

Gujarat.—Good rain was received in June nearly everywhere in Gujarat except Ahmedabad and Panch Mahals districts. In the South of the Division, however, the rain received during the last week of the month was rather heavy and continuous. In July, ample rains were received but in August there were only light showers. Towards the end of September more rain was desired in some parts of Gujarat, while in others it was rather excessive. Floods in the Tapti affected the crops in parts of Surat. There was practically no rain during October.

Konkan.—In June and July the position in the Konkan was satisfactory on the whole. In August the rainfall though much below the usual amount was general and even in distribution. In September it was fairly good. Widespread and general rains were received in October almost throughout the Konkan.

Deccan and Karnatak.—Sufficient rains were received in June in the Western parts of the Deccan. In the eastern parts of the Division,

comprising a large portion of Ahmednagar, the whole of the Sholapur district and the eastern portion of the Satara district, however, the rainfall was far short of the normal, while in the Karnatak the rainfall was deficient in the eastern parts of Belgaum and almost the whole of Bijapur district. The position in the rest of the Division was, however, generally satisfactory. In July the rainfall in the Western parts of the Deccan was generally adequate. In the North Deccan, however, the rains were rather too much in places. In the South-east Deccan and especially in Sholapur district, on the other hand, the rainfall was very deficient as also in the Karnatak. The rainfall was quite inadequate in August in the Karnatak and the Deccan. Continuous and excessive rains were received in the North Deccan at the beginning of September but elsewhere they were both substantial and well distributed. In the Karnatak, the rains were generally sufficient, yet more rain was needed towards the end of the month to improve the general condition of the crops. Good rains were received during October almost throughout the Deccan and parts of the Karnatak.

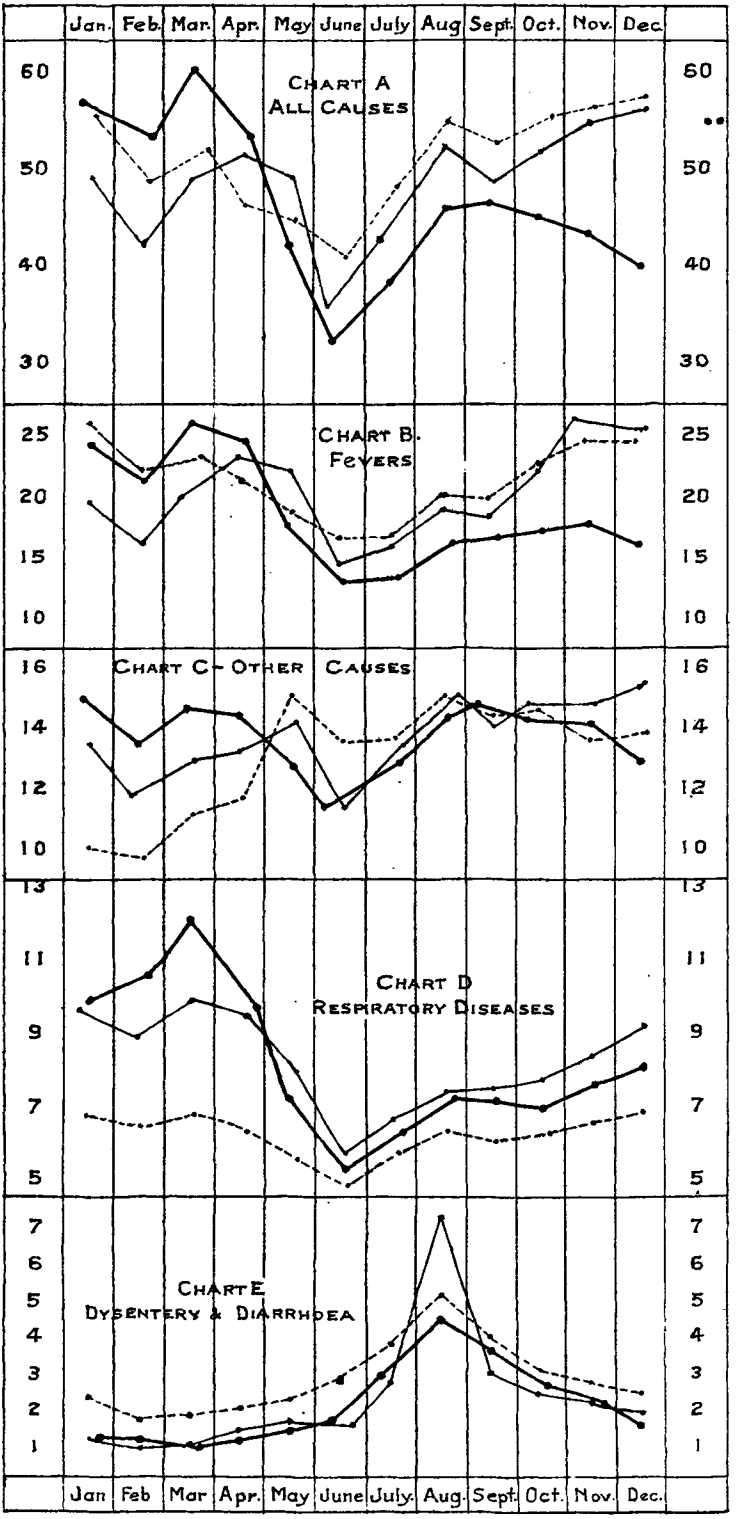
32. The prices of food grains throughout the Bombay Presidency were lower than those of the previous year by 19 per cent. in the Gujarat, about 20 per cent. in the Karnatak and Deccan and 2 per cent. in the Konkan, except Thana, where the price was higher by 8 per cent. approximately. The prices in Sind fell by about 28 per cent. while in Bombay City they were 17 per cent. less.

CHART III

MONTHLY INCIDENCE OF DEATHS FROM CHIEF CAUSES.

1930 ——— 1929 ——— PREVIOUS AVERAGE .....

SCALE FIGURES REPRESENT DEATHS IN THOUSANDS.



* 1918 (INFLUENZA YEAR) OMITTED IN THE AVERAGE OF CHARTS A.B.&D.

SECTION VI.

History of Chief Diseases.

General Remarks.

33. Apart from the prevalence of cholera and small-box, the health of the presidency as a whole compared favourably with the previous year.

In spite of a total mortality of 15,142 from cholera and 21,341 from small-pox causing a rise in the death-rate from ·47 and ·56 respectively in 1929 to ·79 and 1·11 in the year under report, there was a fall in the total death-rate for the Presidency from 30·53 to 29·53, which was due chiefly to improvement in the death-rates under the headings fevers (12·86 to 11·65) and plague (·94 to ·26). The death-rates from respiratory diseases and all other causes during the year under report were practically the same as last year. There was a slight rise from 1·31 to 1·39 under dysentery and diarrhœa.

The health history of the Presidency from 1918, the year of influenza pandemic judged by the total mortality figures is one of steady progress up to 1922, the year with a record of low death-rate (23·61) and thereafter of gradual rise beyond the normal standard. Thus the death-rate figure for 1923—25·89, for 1924—27·63, for 1925—23·66, for 1926—28·55, for 1927—25·71, for 1928—27·28, for 1929—30·53 and for the year under report 29·53 indicates that the mean for all these years (27·34) compares favourably with that for 1911–15 (27·56). The records of the year show that cholera and plague were prevalent in all the Registration Districts except Sind which was quite free from the two diseases during the year. Small-pox was prevalent in a severe epidemic form in the Western, Gujarat and Central Registration Districts, Southern and Sind being lightly affected.

Comparing the figures with the mean of previous five years 1925–29, there was a slight increase in mortality practically under all the heads except plague which shows a decrease (·61 to ·26), Fevers (10·91 to 11·65), Respiratory Diseases (4·92 to 5·20), other causes (8·20 to 8·73), Dysentery and Diarrhœa (1·34 to 1·39) and the Epidemic Diseases Cholera (·44 to ·79) and Small-pox (·32 to 1·11).

June, as usual, was the healthiest month in the year. This is due to the fact that the mortality from plague and small-pox decreases by that time, while the rise usually caused by dysentery and diarrhœa and cholera in the after months is not existing then. The mortality from fevers, respiratory diseases and all other causes is also low during June. On the other hand the death-rate increases during the months of August, September and October when fevers, plague and cholera deaths are added to the higher rates for dysentery and diarrhœa and all other causes. In the early months of the year, the death-rate is kept up chiefly by fevers, small-pox and plague.

Details of the various diseases are given under separate headings and further comparison is shown in the table in paragraph 29 and in graphic form in the charts inserted in this Report.

Fevers.

34. Fever mortality shows a decrease on the previous year's figures—223,274 deaths (115,345 males and 107,929 females) against 246,428 in 1929, but an increase on the mean of previous five years (209,112).

The number of deaths from fevers during the year under report was the highest since the year 1922 except 1929. The death-rate was 11·65 as compared with 12·86 in 1929 and a quinquennial mean of 10·91.

The annual mortality recorded under this heading in previous years is given in the following table :—

Year		Fever deaths	Rate per mille	Year		Fever deaths	Rate per mille
1901–10	mean.	258,497	14·00	1923	..	196,231	10·24
1911–15	..	247,926	12·66	1924	..	214,563	11·20
1916	..	262,401	13·40	1925	..	183,764	9·69
1917	..	298,919	15·26	1926	..	222,466	11·61
*1918	..	1,284,013	65·55	1927	..	186,543	9·73
1919	..	274,459	14·03	1928	..	206,356	10·77
1920	..	266,092	13·58	1929	..	246,428	12·86
1921	..	226,100	11·80	1930	..	223,274	11·65
1922	..	197,888	10·23				

* Influenza year.

Distribution of fever deaths is shown in Annual Form No. IX.

In the Presidency as a whole the decrease in fever death-rate as compared with the previous year is shared by 3 Registration Districts - Sind 19,155, Southern 7,082 and Central 575, while the Gujarat Registration District shows an increase of 1,812 and Western 1,805 over the previous year. Bombay City shows an increase of 41 over the previous year's figure—2,287.

The highest death-rates were recorded in Broach (20·07), Sukkur (19·33), Upper Sind Frontier (18·91), Panch Mahals (18·72), East Khandesh (18·58), West Khandesh (17·50), Larkana (16·97), Ahmedabad (15·04), Sholapur (14·73), Nasik (14·16), Nawabshah (13·06), Satara (12·61), Bijapur (12·36), Poona (12·07) and Kaira (12·01).

The urban death-rate was 7·41 and the rural 12·68 as compared with 8·43 and 13·93 respectively in 1929. As usual the rural death-rates are considerably higher than urban. The highest urban death-rates for the Presidency proper were recorded in Nasirabad (26·09), Kapadwanj (23·38), Ankleshwar (22·63), Dohad (22·47), Borsad (22·29), Dakore (21·40), Godhra (20·88), Mehmedabad (20·85), Sholapur (20·66), Barsi (19·16), Umreth (18·97), Anand (18·60), Yeola (18·41), Nadiad (17·39), Jambusar (16·74), Chalisgaon (16·51), Ahmedabad (15·85), Viramgaon (15·81), Dholka (15·50), Nandurbar (14·95), Parola (14·40), Pandharpur (14·36), Dharangaon (12·13), and in Sind, Garhiyasin (29·17), Ratodero (27·85), Rohri (21·83), Sukkur (16·46), Kambar (15·63), Jacobabad (15·03), Shikarpur (13·89) and Larkana (12·26).

Details of sub-headings of deaths from fevers are as follows :—

35. *Malaria.*—21,119 deaths from malaria were recorded against 30,851 in 1929. The figures are for Central Registration District 6,485 ; Western 5,415 ; Southern 5,172 ; Sind 2,929 and Gujarat 931 ; as

compared with 7,005 ; 5,778 ; 7,025 ; 10,211 ; and 621 respectively in 1929. 187 deaths were registered in Bombay City against 211 in the previous year. The decrease as compared with the previous year is shared by all the Registration Districts. The greatest decrease in the total figure for the Presidency as a whole during the year under report is, therefore, chiefly due to fall in Sind. The inaccuracy of this record which clearly demonstrates the defective registration of vital statistics in Sind has been described in the Annual Report for 1929.

The death-rate from Malaria for the Presidency as a whole was 1·10 against 1·61 in 1929. The urban and rural death-rates were ·83 and 1·17 respectively, as compared with ·83 and 1·80 in 1929. As usual the rural death-rates are higher than urban. The highest rural death-rates from Malaria were recorded in Poona (4·32), Nasik (2·84), Ahmednagar (2·74), Kanara (2·39), Karachi (1·93), Belgaum (1·92), West Khandesh (1·72), Upper Sind Frontier (1·70) and Thana (1·68). By urban circles the highest death-rates were recorded in Rohri (21·10), Jambusar (11·45), Larkana (10·74), Tando Adam (9·79), Dholka (6·63), Umreth (5·78), Umarkot (5·72), Kotri (5·40), Shikarpur (5·29), Surat (4·35), Sehwan (4·29), Ilkal (3·21), Malegaon (2·99), Lonavla (2·58), Hyderabad (2·19), and Bijapur (2·03).

36. *Anti-Malarial Measures.*—For treatment of cases visiting villages in the most malarial parts of the presidency 42 Sub-Assistant Surgeons were appointed. Out of these 34 were appointed by the Surgeon General with the Government of Bombay, 8 were appointed by the Assistant Director of Public Health, Sind Registration District (2 for District Local Board, Sukkur, and 1 for District Local Board, Larkana, and 5 were paid out from the Sind Relief Fund).

They visited 3,066 villages, treated 53,110 persons for malaria and 28,123 persons for other diseases. They examined 22,978 children for Spleen out of which 9,523 were reported to have enlarged spleen.

Preventive measures in Sind.—There were in addition to free distribution of quinine in all districts through various agencies, 14 Subordinate Medical Service Officers appointed. Of these, 6 were appointed by the Surgeon General and 8 were employed by the Assistant Director of Public Health, 5 of these being paid from the amount of Rs. 50,000 out of the Sind Relief Fund placed at his disposal by the Commissioner in Sind, 2 were paid by the District Local Board, Sukkur and one by the District Local Board, Larkana. These Officers were supplied with quinine, cholera pills, Potassium Permanganate crystals and anti-cholera vaccine. The Assistant Director of Public Health, visited some of the talukas served by the Medical Officers to watch health conditions prevailing there and to organise the work.

In Sind during the period from August 1930 to March 1931, 747 villages were visited by 14 Subordinate Medical Service Officers as compared with 3,037 villages visited by 22 Subordinate Medical Service Officers in the last year from 14th September 1929 to 31st March 1930. 12,362 malarial patients and 10,398 other patients (in all 22,760 patients) were treated by them as compared with a total of 84,528 patients treated

during the previous year. Besides this, the Medical Officers permanganated wells in the villages and advised people regarding personal hygiene.

During the year under report in all 251,940 malarial patients were treated at the various Civil Hospitals and Dispensaries in Sind—Karachi 52,575, Hyderabad 46,576, Nawabshah 24,419, Thar and Parkar 13,539, Larkana 42,148, Sukkur 59,472, and Upper Sind Frontier 13,211.

Out of the stock of 683,300 quinine pills 5 grains and 200,000 pills 2 grains, 249,300 pills of 5 grains and 26,000 pills of 2 grains were supplied to Officers and various agencies in Sind during the year 1930 for free distribution, through the Assistant Director of Public Health, Sind Registration District.

In the Southern Registration District, 645 villages were visited by the special Subordinate Medical Service Officers appointed on anti-malarial duty. Out of a total of 12,067 cases treated by them, 7,967 were malarial and of 5,214 children examined 2,468 were found to have enlarged spleens.

The following is a summary regarding malaria survey in Railway premises at Alnawar and Londa :—

A special malarial survey was carried out at Alnawar and Londa in conjunction with the District Medical Officer of the M. S. M. Railway and the Assistant Director of Public Health, Southern Registration District. The breeding places of mosquitoes were located and special attention was paid to canalization and oiling of the pools, stocking of fish in the village water tank, removal of vegetation from its edges and making them steep and filling of burrow pits were also suggested. The work was entrusted to a Special Medical Officer of the Railway on malarial duty. On the recommendation of the Assistant Director of Public Health, Southern Registration District, 6,000 quinine tablets were supplied to the Assistant Surgeon, M. S. M. Railway for carrying out the quininisation of the Civil population at Londa and Alnawar. This localised effort reduced the spleen census from 51 per cent. to 31 per cent. Further progress is being watched.

In the Central Registration District 267 villages were visited by 7 Subordinate Medical Service Officers appointed on anti-malarial duty. Out of a total of 6,636 cases treated by them 5,669 were of malaria. An idea of the extent of malaria prevalent in the Central Registration District, can be formed from the record of the total number of malarial patients treated in the Civil Hospitals and Dispensaries which this year amounted to 64,601 as against 84,072 in 1929. The largest number 23,820 was as last year from Poona District alone. Satara coming next with 14,997, Ratnagiri 10,844, Ahmednagar 9,556 and Sholapur the lowest with 5,384. The Assistant Director of Public Health, Central Registration District, carried out malaria survey in about 25 places. He examined 1,787 children, out of them 304 were found to have enlarged spleens. Advice on the preventive measures was given to local bodies and others. In every village that he visited, meetings were held and the people were advised in respect of the treatment of malaria in all its forms and instructed the importance of the same.

In Gujarat Registration District the Touring Medical Officers appointed on anti-malarial work visited 443 villages in Surat and Panch Mahals Districts. Out of a total of 12,577 cases treated by them 10,894 were malaria. Out of 7,534 children examined 3,299 were found to have enlarged spleens.

In the Western Registration District 964 villages in the malarious talukas of the West Khandesh, Nasik, Thana and Kolaba Districts were visited by Subordinate Medical Service Officers. Out of a total 27,193 cases treated by them, 16,218 were of malaria, out of 10,230 children examined 3,756 were found to have enlarged spleens. 109 Schools were inspected by them.

37. *Distribution of Quinine.*—During the period under report Government sanctioned (1) Rs. 35,000 for free distribution of quinine increased afterwards to Rs. 38,000 (2) Rs. 35,000 for sale of quinine at Post Offices reduced by reappropiation to Rs. 31,025 and (3) Rs. 9,750 for the cheap sale of quinine treatments.

The expenditure against the first grant was Rs. 36,865. Quinine was distributed through Revenue and other officials, a quantity worth Rs. 12,985 being distributed among school children by the Educational Department. Quinine was also distributed by the Assistant Directors of Public Health, Inspectors of Sanitation and Vaccination and selected vaccinators.

Out of the second grant Rs. 29,730 were spent in supplying quinine tablets for sale at Post Offices. The Superintendent, Yeravda Central Prison, credited a total amount of Rs. 26,544 realised from the sale into Government Treasury.

Out of the third grant, Rs. 8,330 were spent in preparing and supplying parcels of quinine treatments to Officers of various Departments. The price recovered from them amounted to Rs. 11,472 including arrears.

The Collectors of East Khandesh, West Khandesh, Nasik, Thana, Kolaba, Ratnagiri, Dharwar, Kanara, Surat, Broach, Kaira, Panch Mahals, Ahmedabad, Karachi, Nawabshah, Thar and Parkar, Larkana, Sukkur and the Deputy Commissioner, Upper Sind Frontier, speak in favour of the quinine policy, and its utility.

The constant demand for quinine from the public in rural areas affords sufficient evidence that it has established and maintained its reputation. Treatment of school boys with quinine prophylaxis had its salutary effect on those suffering from enlarged spleens.

There is thus a consensus of opinion that the drug is advancing in popularity among the people, pills or tablets naturally enough being preferred to the powder.

38. *Enteric Fever.*—5,658 of the "Fever" deaths were registered as due to Enteric as against 2,869 in 1929. The accuracy of the figures of death allocated to this sub-head especially in rural areas is not to be relied on. The figures are for the Western Registration District 3,078; Southern 1,299; Central 622; Sind 450 and Gujarat 31 as compared with in that order 397; 1,568; 453; 257 and 33 respectively in 1929. 178 deaths were recorded in Bombay City as compared with 161 in the

previous year. Among town circles the highest number of deaths was recorded in Shikarpur (274), Poona City (94), Hyderabad (47), Kalyan (46), Karachi (32), Gokarn (31), Hubli (29), Larkana (27), Surat (22) and Dharwar (19).

The highest number of deaths from Enteric Fever for rural areas were recorded in the districts of West Khandesh (1,139), Thana (876), East Khandesh (224), Kanara (336), Dharwar (307), Belgaum (273) and Bijapur (220).

Regarding the outbreak of Typhoid Fever at Warar village, District Thana, the Assistant Director of Public Health, Western Registration District, reports :—

"In Warar village of the Thana district at first two cases of typhoid fever occurred in a family early in January 1930. The source of infection was not traceable as the family had left the village on the death of both the cases. The infection spread but as these cases did not resort to the Dispensary for treatment no report was received till the middle of the month. A large number of cases came in for treatment. In all 100 cases of enteric fever were reported to have occurred of whom 8 died. The Assistant Director visited the village, traced the infection to a well which was disinfected and after that no further case was reported."

The Assistant Director of Public Health, Sind Registration District, reports :—

"The very high incidence of Typhoid in Shikarpur town was pointed out to the municipality. The Health Officer in his report explained that as the registration of causation of deaths was not satisfactory and as any case with over 4 to 5 days temperature was reported as Typhoid the increase was therefore not real. The Medical Officer of Health says in his report that the following measures for prevention of Enteric Fever were taken during the year under report. (1) All wells have been disinfected with chlorogen (2) special attention is paid to the Conservancy, (3) Leaflets showing preventive measures are distributed, (4) Carbolic lotion is given for disinfecting hands and stools."

Hyderabad Town.—The Medical Officer of Health, Hyderabad Municipality, says "All Typhoid and Para-Typhoid reported cases were personally examined by me and a copy of Health pamphlet on Typhoid Fever and its prophylactic measures were given in the house of every patient so visited. Fly-catchers were also distributed in the houses of Typhoid patients and shops to get rid of flies which are undoubtedly the most active agents in the spread of the disease. Anti-typhoid and Para-typhoid tubes were sent for and kept in stock and were offered free of charge to the general public and all the contacts were also advised to get themselves inoculated. Magic lantern demonstrations on flies as carriers of Typhoid fever were given to the general public."

39. *Measles.*—4,919 deaths were registered against 8,853 in 1929. The Gujarat Registration District recorded the highest number of deaths—1,459; Central 1,356; Southern 950; Western 914 and Sind 106 as compared with 1,874; 1,402; 1,668; 1,997; and 1,799 respectively in 1929. In Bombay City 134 deaths were recorded against 113 in 1929. The highest death-rates for urban areas were recorded in Jambusar (5·19), Umreth (4·21), Dakore (4·00), Rander (3·60), Kapadwanj (3·24), Ilkal (2·87), Sholapur (2·80), Mehmedabad (2·41), and Dohad (2·37).

Relapsing Fever.—No death was reported from this cause during the year.

Kala Azar.—No death from this cause was reported during the year.

Influenza.

40. A review of the Influenza mortality from 1918 the year of its introduction shows this year's epidemic to have been the mildest of all, the total number of deaths recorded during the year under report being 183 as compared with 280 in the preceding year. Out of these Bombay City alone recorded 75 deaths against 62 in 1929.

The following table shows the estimated number of deaths from Influenza for the first two years since its appearance and as registered thereafter :—

Year		Number of deaths	Year		Number of deaths
1918	..	1,041,481	1925	..	192
1919	..	39,786	1926	..	362
1920	..	16,690	1927	..	267
1921	..	3,679	1928	..	228
1922	..	1,222	1929	..	280
1923	..	991	1930	..	183
1924	..	578			

The statement does not give a correct idea of the severity of the infection as the disease has come to be regarded as not a very serious affection when it prevails in a mild form. It is only when the epidemic is severe with the consequent rise in the death-rate that attention is drawn to it. Most of the deaths during a mild epidemic are recorded under the convenient heading of "Fevers" or sometimes under "*Respiratory Diseases*" which are frequently the sequalæ of the *malady*.

41. By Registration Districts the figures are :—Western recorded 43 deaths from Influenza, Southern 40, Gujarat 13, Central 6 and Sind 6 as compared in that order with 14, 128, 60, 4 and 12 respectively in the preceding year.

In the Western Registration District 159 attacks and 32 deaths were reported from West Khandesh District, Thana 7 attacks and 5 deaths, Bombay Suburban 1 attack and 1 death and Kolaba 18 attacks and 5 deaths. All the town circles were free except Nandurbar which reported 62 attacks and 2 deaths. In West Khandesh District, there were 53 attacks and 15 deaths in February, 104 attacks and 15 deaths in March and 2 attacks and 2 deaths in April. In Thana there were 6 attacks and 4 deaths in February and 1 attack and 1 death in August. In Bombay Suburban there was one attack and one death in November. In Kolaba there was 1 attack and one death reported in every month from January to March, 13 attacks and 2 deaths in April and one attack in November. The usual preventive measures were carried out.

In the Southern Registration District, the mortality under this head was considerably on the decrease as compared to the figures recorded during the last year. 40 deaths were registered during the year under report against 128 in 1929. Of the total deaths registered 30 were from rural circles. Of the remaining 10 deaths in urban areas 6 were returned

from Hubli town alone. Belgaum Cantonment recorded one death. The largest number of deaths among the rural circles was 13 in Dharwar District, Bijapur and Belgaum District returned 10 and 7 deaths respectiyely. Kanara District was quite free. The town circles of Belgaum, Dharwar and Guledgud returned one death each. Leaflets giving instructions for checking the spread of the disease were distributed to the village officers and the Mamlatdars concerned. Dispensary Medical Officers of the Talukas were deputed by the Mamlatdars concerned to treat the patients in villages.

In the Gujarat Registration District there were 363 reported cases and 13 deaths from Influenza against 628 cases and 60 deaths in the previous year. Of these, 161 cases and 5 deaths were reported from Surat District, 135 cases and 3 deaths from Panch Mahals, 64 cases and 2 deaths from Kaira and 3 cases and 3 deaths from Ahmedabad. Broach District was free from the disease. Out of the 161 cases and 5 deaths in the Surat District, 129 cases and 3 deaths were reported from one village of Chorashi taluka, 31 attacks and 1 death from 2 villages of Jalalpur taluka and one attack and one death from one village of Mandvi taluka. Of the 64 cases and 2 deaths in the Kaira District 40 cases and 2 deaths were reported from Dakore town (during the months of March and April 1930) and 24 cases from one village of Mehmedabad taluka, 3 cases and 3 deaths were reported from Ahmedabad City during January and February. The first two cases were local ones while the third was imported from Kadi of Baroda Territory. 135 cases and 3 deaths were reported from Shivrajpur Mines in Halol taluka of Panch Mahals District during the months of March and April. The Medical Officer of the Mines treated the cases as out-door and in-door patients in the mines Dispensary. The occurrence of the disease in this area is the usual feature at this time of the year.

In the Central Registration District only 6 deaths have been recorded during the year under report as against 4 for the previous year, Ahmednagar and Satara towns each returned one death, and 4 deaths were recorded in the rural areas.

In Sind Registration District, Influenza was prevalent in Karachi and Jacobabad Districts. The total number of deaths recorded for the whole year was 6 against 12 in the previous year. All the 6 deaths were reported from Karachi District. In all 2 towns and 5 villages were affected and the total number of cases and deaths was 84 and 6 respectively. Karachi City reported 6 cases and 6 deaths while Kotri town recorded 65 cases only. 13 cases were reported from Shahadadkote rural circle of Upper Sind Frontier District. The first two deaths reported as occurring in Karachi City were imported from Malir. No reports were however received about any outbreak at Malir. The usual precautions with regard to disinfection of house and clothing were taken. The first local death due to Influenza was reported on 19th February. The case was sporadic and adequate steps were taken by the Health Officer, Karachi Municipality, to prevent its spread.

'The Medical Officer, District Prison, Karachi, stated :—" as three cases of Influenza have been admitted in the Hospital within one week, epidemic is declared with effect from 25th July 1930 but the epidemic appears to be of a mild type."

In all 55 cases were reported during the year under report. No death occurred. The Medical Officer reported that preventive measures as regards isolation of patients, segregation of contacts for 10 days, disinfection of barracks, routine gargling of all prisoners with Potash Permanganate, and general cleanliness were adopted.

Influenza was declared in Hyderabad Central Jail on 4th February 1930. In all 145 cases and one death were reported during the year under report. Preventive and prophylactic measures as stated above for the Karachi Prison were adopted.

At the request of the Inspector General of Prisons, the Assistant Director of Public Health, Sind Registration District, visited the Hyderabad Jail on 17th February 1930 and investigated this matter and was of opinion that (1) the disease was influenzal Pneumonia, (2) it was a more virulent type than usual and (3) it attacked mostly new admissions to the Prison who had probably low vitality as most of them had come from the flooded areas.

In connection with the epidemic of Bombay City, the Executive Health Officer reports :—

"The type of the disease was mainly respiratory but some cases of the abdominal type were also seen. Leaflets instructing the public what to do for the prevention of the disease were distributed and they were advised to avail themselves of the medical relief offered at the Municipal Dispensaries and Hospitals."

Respiratory Diseases.

42. During the year under report the mortality from Respiratory Diseases was practically the same as last year—99,678 deaths were registered against 99,896 in the previous year and 94,274 the mean of previous five years. The death-rate was 5·20 against 5·21 in the previous year and 4·92 the quinquennial mean. The urban death-rate (8·16) greatly exceeds the rural (4·48) as compared with 8·49 and 4·42 in 1929.

The mortality list for previous years is as follows :—

Year	Deaths	Rate	Year	Deaths	Rate
1901–1910 mean ..	57,723	3·12	1923 ..	84,334	4·40
1911–1915 mean ..	62,181	3·17	1924 ..	91,103	4·75
1916 ..	79,882	4·08	1925 ..	83,047	4·33
1917 ..	90,667	4·63	1926 ..	103,038	5·38
1918 ..	119,680	6·11	1927 ..	87,963	4·59
1919 ..	98,633	5·04	1928 ..	97,428	5·08
1920 ..	96,486	4·93	1929 ..	99,896	5·21
1921 ..	93,336	4·87	1930 ..	99,678	5·20
1922 ..	82,682	4·31			

The increase over the years preceding the Influenza pandemic (1918) is attributed partly to the actual number of deaths and partly to improved registration of deaths by causes.

43. Gujarat Registration District recorded the highest number of deaths 24,556; Western 23,897; Central 21,523; Southern 11,342; and Sind 7,249 as compared with 26,159; 21,573; 21,660; 12,176; and 7,355 in 1929.

Bombay City recorded 11,111 deaths as against 10,973 in the year previous.

The highest rates were recorded in the Collectorates of Surat (10·61), Kaira (9·51), Ahmedabad (7·89), Broach (7·56), Nasik (7·16), Kolaba (7·00), Ahmednagar (6·74), Thana (6·41), Poona (5·90), East Khandesh (4·77), Karachi (5·56), West Khandesh (5·40), Bombay Suburban (5·16), and Sholapur (4·18).

Urban areas recorded much higher rates than the rural, the result of congestion and consequent facility for the spread of these diseases and also of more correct allocation of deaths under this head. There is a great need for better education in the methods of prevention of these diseases, for the relief of congestion in the big towns, and also the provision of greater facilities for treatment.

The highest rates for urban areas were recorded in Umreth (14·19) Ahmedabad (14·15), Surat (12·67), Viramgaon (12·34), Dhanduka (12·05), Hyderabad (11·85), Dakore (11·26), Ahmednagar (11·21), Karachi (11·08), Poona (10·71), Nasik (10·51), Pandharpur (10·43), Nasirabad (9·52), Panvel (9·40), Jambusar (9·40), Nandurbar (8·45), Yeola (8·26), Junnar (8·28), Gadag (8·24), Kaira (8·22), Rander (7·86), Nadiad (7·80), and Kalyan (7·79).

44. *Phthisis.*—Next to malaria the infectious disease which takes the highest toll in human lives with years of illness and a consequent economic loss is phthisis. This is not only an Indian problem but a world-wide one. In Europe very great efforts are being made to deal with this scourge with marked good results and a similar effort is called for in India. Statistics, not only in India, but in other parts of the world are defective so far as Phthisis returns go. After a very careful study of countries possessing these statistics, it is stated by the Health Section of the League of Nations that 10 per cent. of the mortality can be put down to tuberculosis. This of course has its variations when compared with rural and urban areas.

In this Presidency 22,283 deaths were recorded under Phthisis in 1930 giving a percentage of 3·9 to total mortality. Prior to the advance of the medical science a person contracting Phthisis was considered as having received his seal of death and a rigorous quarantine was practised against the family with the result that recording of deaths under Phthisis was shunned by the people. This prejudice largely prevails in India accounting for its proportion of defective registration. Urban areas recorded 1·73 per mille of population against 1·02 in the rural areas. This to a certain extent can be accounted for by the hospitals being situated in the urban areas and also by the greater congestion in the towns. As a sequalæ of repeated and virulent attacks of malaria, Phthisis plays an important part.

22,283 deaths from this cause were registered equal to a death-rate of 1·16 for the Presidency as a whole. The corresponding figures for 1929 were 22,393 and 1·17 respectively. By Registration Districts, the total figures were Western 6,969; Central 5,668; Gujarat 4,171; Southern 2,756 and Sind 1,279 as compared with 6,566; 5,605; 4,641; 2,841 and 1,292 respectively in 1929. In Bombay City, deaths from phthisis were 1,440 equal to a death-rate of 1·25 compared with 1,448 or a death-rate of 1·26 in the previous year.

The urban death-rate was 1·73 and the rural 1·02 against 1·80 and 1·02 respectively in the previous year. The highest death-rates for urban areas were recorded in Dharangaon (4·38), Rander (4·36), Panvel (4·29), Mehmedabad (4·01), Chalisgaon (4·00), Belgaum (3·98), Chiplun (3·64), Poona City (3·62), Junnar (3·39) Ahmedabad (3·16), Ahmednagar (2·76), Satara (2·76), Karachi (2·72), Shikarpur (2·67), Surat (2·61), Guledgud (2·51), Bhiwandi (2·46), Hyderabad (2·42), Kapadwanj (2·37), Nadiad (2·32) and Gokarn (2·29).

The highest death-rates for rural areas were recorded in the districts of Kolaba (3·75), Thana (2·39), Ratnagiri (1·89), Kaira (1·75), and Bombay Suburban (1·52), the labour recruiting districts for Bombay.

Out of 110 deaths from Phthisis in Nasik town, 69 (24 males and 45 females) were among the residents and 41 (18 males and 23 females) among the non-residents. Tuberculosis in Nasik town is increasing and is due to import of infection from many places in the Bombay Presidency and Central Provinces. The question of control of the disease in the town is under consideration of the Municipality.

In the rural circles, incidence of phthisis is high in the Konkan. The proximity of Bombay contributes to this excess in a large measure. Besides, the high death-rates may be attributed to the recruitment of mill hands in Bombay from these areas who return to their homes to die after getting infected in Bombay. These remarks apply to Ratnagiri, Kolaba, Thana and Kanara Districts which supply labour to Bombay City.

In Hyderabad town, 176 deaths from consumption were recorded as against 199 in the previous year and 112 and 175 in the years 1928 and 1927 respectively. As usual magic lantern lectures on tuberculosis and protection from cold were delivered to ladies in different parts of the City. Disinfection of houses where Consumptives were reported to have died was also carried on throughout the year. In order to remove the dust nuisance, a dust removal gang was employed throughout the year.

The Anti-Tuberculosis Dispensary in Karachi City continued to do good wrok. During the year under report, 31,315 patients were treated. Of these 25,491 were tuberculosis cases while 5,824 were under observation. In the preceding year 17,984 were tuberculosis cases while 5,476 were treated for abscess, 826 new patients were admitted during the year as against 932 in 1929.

There are 2 special Health Visitors who during the year under report visited 21,920 houses as against 17,256 in 1929 and reported 559 cases as against 442 in the preceding year. Of these 279 were tuberculosis as against 247 in 1929. 2,433 visits were paid by the Medical Officers and 4,067 by the Nurse during the year under report as against 2,629 and 4,133 respectively in 1929.

The Assistant Director of Public Health, Central Registration District, carried out an investigation into the incidence of Tuberculosis in Ahmednagar town at the instance of the Municipality and made some useful recommendations to improve the general health conditions of the town.

45. *Pneumonia.*—22,363 deaths from Pneumonia were registered equivalent to a death-rate of 1·17 per mille of population for the Presidency as a whole. The corresponding figures for 1929 were 22,163 and 1·15 respectively. Sind Registration District recorded the highest number of deaths—4,815; Gujarat 4,610; Western 3,659; Central 1,294; and Southern 295 as compared with 5,058; 4,519; 3,218; 1,581; and 289 respectively in 1929. Bombay City registered 7,690 Pneumonia deaths against 7,498 in 1929.

The urban death-rate was 3·56 and the rural ·59 against 3·78 and ·52 respectively in 1929. Amongst towns, recording the highest death-rates were Hyderabad (7·57), Umarkot (6·43), Surat (6·28), Karachi (5·80), Bulsar (5·28), Nasik (5·22), Ahmednagar (4·86), Poona City (4·67), Tatta (4·33), Rohri (4·24), Mirpurkhas (4·00), Matiari (3·88), Bassein (3·76), Nadiad (3·54), Panvel (3·02), Larkana (2·99), Sukkur (2·75), Thana (2·49), Tando Adam (2·93), Lonavla (2·78), Bhiwandi (2·46), Viramgaon (2·36) and Dhulia (2·27).

Bombay City recorded a death-rate of 6·69 against 6·53 in the previous year.

Cholera.

46. A somewhat severe epidemic of cholera as compared to last year prevailed from July to December and resulted in 15,142 deaths. In 1925 and 1926 there were 57 and 73 deaths respectively. In 1927 a severe epidemic of cholera prevailed from March to November and resulted in 26,153 deaths. In 1928 and 1929 the mortality, viz. 6,881 and 9,084, respectively, was smaller. Previous bad cholera years were 1919 (51,551), 1912 (64,505), 1909 (28,714), 1906 (46,119), and 1900 (163,200).

The number of deaths recorded from cholera was 15,142 against 9,084 in 1929 and 8,450 the mean of previous five years. The death-rate was ·79 against ·47 in 1929 and ·44 the quinquennial mean. The urban and rural death-rates for the Presidency as a whole were ·31 and ·91 respectively.

The following table gives the deaths recorded in previous years since 1900 :—

Year	Number of deaths	Year	Number of deaths
1900	163,200	1916	19,841
1901	13,600	1917	17,003
1902	3,229	1918	8,834
1903	1,825	1919	51,551
1904	13,156	1920	2,047
1905	5,396	1921	3,521
1906	46,119	1922	2,768
1907	7,656	1923	9,221
1908	1,759	1924	8,236
1909	28,714	1925	57
1910	3,694	1926	73
1911	5,817	1927	26,153
1912	64,505	1928	6,881
1913	5,134	1929	9,084
1914	17,779	1930	15,142
1915	377		

Distribution.—Vide Annual Form No. VII.

In the Presidency proper all the Collectorates with the exception of Bombay Suburban, Kanara and Broach were more or less affected while Sind was quite free from the disease. The epidemic was chiefly confined to the districts of Satara (3,800 deaths) or a ratio of 3·71 per mille of population, Sholapur (2,497), East Khandesh (1,589), Poona (1,399), Bijapur (1,373), Nasik (1,285), West Khandesh (934), Ahmednagar (941), Belgaum (593), and Panch Mahals (239). Bombay City reported 40 deaths against 8 in the previous year. It prevailed to a greater or lesser extent in 163 Registration Circles infecting 2,012 villages. The epidemic reached its height in September during which 4,964 deaths occurred.

47. To take the Registration Districts separately, their history is as follows :—

The heaviest incidence of cholera occurred in the Central Registration District with 8,692 deaths; Western 4,010; Southern 2,106; and Gujarat 294 as compared with 45; 2,576; 24; and 20 respectively in 1929.

In the Central Registration District, there were 8,692 deaths from Cholera against 45 in 1929. The death-rate being 1·88 against 0·01 in the previous year. The greater sufferer from Cholera was the Satara District which had 3,800 deaths, Sholapur reported 2,497 deaths, Poona and Ahmednagar were comparatively less affected, 1,399 and 941 deaths respectively being recorded. Ratnagiri District reported only 55 deaths. Cholera first broke out at Pandharpur on 3rd July 1930, where 2 imported cases were reported, one came from Yeotmal in the Central Provinces and the other from the Nizam's Territory. In the same month all districts except Ratnagiri were affected. The cause of infection in these districts seems probably due to imported cases from the Nizam's Territory and returning pilgrims from Pandharpur after the Ashadhi Fair. Out of 55 rural and 23 urban circles 46 and 18 respectively reported deaths from Cholera; of 1,186 villages and towns which suffered from the disease, 1,128 reported deaths. Cholera assumed an epidemic form in the month of July. It reached its highest point in the month of September and then gradually declined.

In Satara District, Cholera broke out on 18th July 1930. This district was the worst affected—7,856 attacks and 3,800 deaths were recorded. The death-rate was 3·71. Village Sawade in Karad taluka was first infected on 18th July 1930. Other villages in the taluka and Walwa, Patan talukas and Shirala Peta were affected in the last week of July, Satara, Tasgaon, Khanapur, Man and Koregaon talukas and Karad, Ashta and Islampur towns in August, Khatav taluka, and Satara and Wai towns in September and Wai and Javli talukas in October. The disease was prevalent in 433 villages and 5 towns out of 1,341 villages and towns in the district. All town circles and talukas were affected. Out of 5 towns in the district, Wai town reported the highest number of deaths, viz. 41 and out of 433 villages the highest number of deaths occurred in Masur village, taluka Karad, the number of deaths being 85. The source of infection in 413 villages was indigenous and in 25 villages

it was imported. Out of 433 villages affected, 137 villages derived their water supply from the river and 296 villages from wells or tanks.

The District Local Board, Satara, sanctioned the scheme for combating the cholera epidemic drawn up by the Assistant Director of Public Health, Central Registration District, on 29th September 1930 after the epidemic had got a firm footing in the district, i.e., after two months of the outbreak, with the result that the epidemic could not be controlled as easily as in other districts.

Cholera broke out in Sholapur District on 3rd July 1930 and was prevalent in 285 villages out of 719. All the 3 towns and 7 rural circles were affected. There were 5,806 attacks and 2,497 deaths. The death-rate was 3·36. Cholera first broke out at Pandharpur on 3rd July 1930; the infection was received from Yeotmal in the Central Provinces and the Nizam's Territory. In the same month Pandharpur, Madha, Barsi, Sholapur and Karmala talukas were affected and the remaining two talukas Sangola and Malsiras in September. The epidemic reached its maximum in September—999 deaths were recorded. Barsi taluka carried over infection from last year and reported 16 deaths in January and one sporadic case in April. Out of 285 villages affected the highest number of deaths was 77 in Mandrup village, Sholapur Taluka. Sholapur Town reported the highest mortality, viz. 301 deaths. Sholapur City got infection from a returning pilgrim from Pandharpur at the time of the Ashadhi Fair. Pandharpur Town recorded 71 deaths. It received infection from His Exalted Highness the Nizams Dominions and Yeotmal in Central Provinces and in turn gave it to Sholapur City. In 9 villages the first case occurred as an importation from other villages and in 276 villages out-breaks were indigenous. Out of 282 villages affected, 119 villages derived their water-supply from rivers and 163 villages from wells or tanks.

In Poona District cholera broke out on 17th July 1930 and was prevalent in 208 villages and towns, out of 1,157 villages and towns. All rural and 7 urban circles were affected. There were 2,931 attacks and 1,399 deaths. The death-rate was 1·42. The district was free from cholera practically till the end of June. Cholera first broke out at Alandi on 17th July 1930 and the case was a returning pilgrim from Pandharpur. From Alandi infection spread to Haveli taluka and certain villages in Khed taluka and was confined to these talukas till July. In August Ambegaon, Dhond, Mulshi and Sirur petas and Purandhar, Mawal and Poona City talukas were affected. Indapur taluka was affected in September, Bhimthadi in October and Junnar in November. Haveli taluka was badly affected and returned 693 attacks and 355 deaths. Next to it was Indapur which reported 437 attacks and 191 deaths. Out of 8 urban circles, Poona City reported the highest number of deaths, i.e. 30. Out of 208 villages affected, the highest mortality (50) occurred in Hadapsar village. In 8 villages the first case occurred as an importation from other villages and in 207 villages, out-breaks were indigenous. Out of 215 villages affected, 111 villages had drinking-water from rivers and 104 from wells or tanks.

Cholera broke out in Ahmednagar District on 10th July 1930 and was prevalent in 236 villages and 2 towns out of 1,346 villages and towns. All the rural circles were affected. 2,317 attacks and 941 deaths were recorded. The death-rate was 1·30. The district was practically free from the disease to the end of June except February during which only 4 deaths occurred in Shrigonda taluka. On 11th July 1930, Molunji village on the Godavari river in Newasa taluka was first infected ; it received infection from the Nizam's Territory. The highest mortality (186) occurred in Kopergaon taluka. In 7 villages the first case occurred as an importation from other villages and the source of infection in 232 villages was indigenous. In 237 villages affected, the drinking water supply in 126 villages was from wells or tanks and 111 villages had river water.

There were only 55 deaths from cholera in Ratnagiri District. The disease broke out on 9th November 1930 and was prevalent in only 8 villages and in Malwan town during the year under report. Out of 11 rural circles 2 were affected. Khed taluka was affected in November and returned 44 deaths. Only one village in Mandangad peta was infected on 5th December 1930 and returned 9 deaths. Malwan town received infection from Pandharpur and reported only 2 deaths. Out of 8 villages affected the source of infection in 3 villages was indigenous.

The usual precautionary measures were carried out in all the affected districts.

During the year under report 11 Medical Officers were appointed on Cholera duty—3 each for Ahmednagar, Poona and Satara districts and 2 for Sholapur District. The total number of anti-cholera inoculations in the Central Registration District was 58,628, Satara 22,865, Ahmednagar 13,600, Sholapur 13,574, Poona 8,156, and Ratnagiri 433. These were performed by the Special Inoculators appointed for the purpose, Medical Officers in charge of Hospitals and Dispensaries and others. Out of the total number of 13,574 inoculations performed in Sholapur District, 6,753 were done by the Inspector of Sanitation and Vaccination, Sholapur District.

Next to Central, Western Registration District was badly affected. Compared to the year preceding, the incidence of cholera for the year under report was high, 4,010 deaths being recorded against 2,576 in 1929, and 1,352 the mean of previous five years. The death-rate was 1·01 against ·65 in 1929 and ·32 the quinquennial mean. Cholera season commenced on 4th July 1930 though there were some sporadic cases in certain places during previous months. The disease was present in January in Jalgaon and Amalner Rural circles in East Khandesh District, Sakri taluka of West Khandesh and Baglan taluka of Nasik District. In February a few cases occurred in Nasik town. In March there were some cases in Dhulia town and Bhiwandi rural circle of Thana District. In April Dindori taluka of Nasik District was affected. This Division was free in May and June. From July to December the disease prevailed in East Khandesh, West Khandesh, Nasik and Thana Districts and in Kolaba District during October, November and December 1930. The

first case of cholera was reported from Bahadarpur in Parola taluka, East Khandesh District, on 4th July 1930. The case was indigenous. The Assistant Director of Public Health, Western Registration District, reports :—

"Cholera was prevalent at this time in Nizam's Dominions and the source of infection could only be in two ways. Persons from Nizam's Dominions might have brought it with them and as a matter of fact, at this time, several people were reported to have come to this part from the Nizam's Territory though they had nothing to do with the case in question. The other way is presence of dormant carriers in the village ; but as no investigation could be carried out, this is merely a guess and is not of much value in determining the source. As is generally known, carriers of this type do exist and play a considerable part in waking up the infections at proper time. Investigation of this problem would throw light on the origin of many outbreaks. As usual, infection through rivers played an important part in the spread of the disease. Most of the infected villages are situated on the banks of the rivers. Travellers also carried the infection."

In East Khandesh District the disease appeared in 13 rural and 10 town circles and was reported from 203 towns and villages. There were 3,598 attacks and 1,589 deaths. Cholera prevailed in East Khandesh from July to December. A few cases occurred in Jalgaon and Erandol talukas during January. The district was free from February to June. In West Khandesh the disease appeared in 8 rural and 2 town circles and was reported from 137 villages and towns. There were 2,067 attacks and 934 deaths. The disease prevailed in this district also from July to December. The highest number of cases and deaths was 550 and 288 in Navapur taluka. Dhulia, Sindkhed, Shahada and Shirpur talukas paid heavy tolls. The first case at Khed-Digar, Shahada taluka, was imported from Barwani State.

In Nasik District the disease appeared in 11 rural and 6 town circles and was reported from 169 towns and villages. There were 2,643 attacks and 1,285 deaths. The disease prevailed from July to December. Sporadic cases occurred during February, March and April. Nasik, Sinnar, Igatpuri and Nandgaon talukas reported the highest number of deaths, viz. 287, 202, 210, and 162 respectively. In Nasik District, Bhagur in Nasik taluka, Wani in Sinnar taluka and Manmad were the centres of distribution of the infection. Villages near Bhagur drew their drinking water supply from the Darna river. Possibly contaminated water of the river was responsible for the disease.

In Thana District 5 rural and 2 town circles were affected and deaths were reported from 16 villages. There were 90 attacks and 60 deaths. The disease prevailed from August to December.

In Kolaba District the disease appeared in 4 rural and 1 town circles and was reported from 27 villages. There were 226 attacks and 142 deaths. The disease prevailed in this district from October to December 1930. It was confined to Mahad and Panvel talukas. In Kolaba District, Sarsan village in Khalapur peta was infected on 14th October 1930. Only one death occurred. However, cholera may be said to have

first appeared in this district in Mahad taluka. The Medical Officer in charge Leper Asylum Dispensary, Poladpur, came across cases of cholera in village Poladpur on 30th October 1930. Four of the inmates of the Asylum itself were reported to have been suffering from diarrhœa and vomiting on 30th October 1930. The patients recovered after treatment. There was heavy rain about 28th October 1930, which might have contaminated the water of the Savitri river on which the village is situated. The Inspector of Sanitation and Vaccination, Kolaba, found that the first person attacked at Kopade Budruk on 2nd November 1930 had gone to Satara District to purchase articles for sale in his village. He was attacked on his return. Most of the cases were among wandering Mahars.

Preventive measures.—Long before the approach of cholera season recommendations for adopting preventive measures were sent to the local bodies. Stock of cholera medicines in possession of the Mamlatdars and Mahalkaries was checked. Daily reports were scrutinised to suggest preventive measures to the local authorities and to direct movements of the Inoculators. Medical help was made available to each place as soon as possible after the notification of the outbreak. District Local Boards of East Khandesh, West Khandesh and Nasik made provision for the expenditure on account of the epidemic and authorised the Assistant Director of Public Health to appoint Medical Officers on cholera duty and to direct their movements. As a result of this arrangement, Medical Officers were appointed without delay and their movements were immediately directed as the daily reports demanded. Inspectors of Sanitation and Vaccination were directed to assist the Medical Officers in areas where the epidemic was severe. The Vaccinators were allotted definite areas for sterilisation of water supply and treatment of patients by Potassium Permanganate pills. The Medical Officers had thus more time for inoculation work. Presidents of the District Local Boards were advised to utilise the services of the teachers for cholera duty. Causes of the outbreaks were ascertained. Improvements in respect to the sterilisation of drinking water supplies and conservancy were suggested, water works were inspected with a view to suggest means to remedy the defects. Towns and villages where the epidemic was sudden and severe were personally inspected by the Assistant Director of Public Health.

During the year under report 11 Medical Officers were appointed on cholera duty in the Western Registration District—5 for East Khandesh, 3 for West Khandesh and 3 for Nasik. The total number of anti-cholera inoculations in the Western Registration District was 42,698, East Khandesh 19,664, Nasik 13,870, West Khandesh 6,504, Kolaba 2,417 and Thana 243. The total number of patients treated by doctors and others with various kinds of treatments was 1,635.

Next to Western, Southern Registration District was badly affected. It was free from cholera till 8th of April 1930 when two suspicious cases were reported from Belgaum District. In Dharwar District the epidemic commenced from 23rd June 1930 while in Bijapur it started from

19th July and continued till the end of the year. 2,106 deaths were registered against only 24 in the previous year. Bijapur District was the worst affected recording 1,373 deaths; Belgaum District registered 593 deaths while there were 140 deaths reported from Dharwar District. Kanara District was quite free. The epidemic was at its height in the last week of September in the Division as whole when 476 attacks and 173 deaths were recorded. The death-rate was 0·66 against 0·01 in the previous year, the quinquennial mean being 0·90. Of the total number of deaths, 1,952 were among the rural circles and 154 in urban areas. The epidemic commenced from June and reached its highest point in October; then it took a downward course. Of the total number of 4,738 villages, 299 were affected. Among the town circles Gadag town was the worst affected and returned 92 deaths equal to a death rate of 2·36 per mille of population.

Cholera cases were first reported on 23rd June 1930 from Railway premises of Gadag Station and Betigeri reported 21 attacks and 11 deaths during the month. On investigation it was found that the first case that occurred in Betigeri had been to Hubli and was reported to have been attacked 5 days after return to Betigeri. The infection in Betigeri was then carried to the neighbouring villages of Nagsamudra and Narsapur on the 9th and 12th July 1930, being in close communication with Betigeri. The latter was responsible for the infection of 5 villages in the taluka itself and one, Annigeri, in Navalgund and Savadi in Ron taluka of the Dharwar District which were affected on 25th July 1930. Four other villages in Gadag taluka were affected in July, the source of infection being from Nagsamudra and Narsapur. Thus 16 villages of the Gadag taluka were affected. The water supply in almost all the infected villages being from wells the preventive measures taken proved successful and the epidemic was brought under control at an early date and it completely subsided by the 17th September 1930. Gadag-Betigeri town and the taluka suffered heavily and recorded 103–97 and 82–39 attacks and deaths respectively out of the total number of 194–40 attacks and deaths registered in Dharwar District during the year. In Belgaum District a suspicious case was reported from Belgaum town on the 8th of April 1930. The water supply of the house and those of the neighbouring houses were disinfected by the Municipality. Since then the district was free up to 18th August 1930 when sporadic cases—one attack and one death from Darur and one attack from Halyal village in Athni taluka were reported during the month. On the 5th of September, Kudchi village in the same taluka was infected returning 4 attacks and 3 deaths. The river Krishna which was already contaminated forms the only source of drinking water supply and hence the infection in Kudchi. Of the total number of 30 infected villages in the taluka the source of infection in 19 villages was traced to the Krishna river water used for drinking purposes. This taluka suffered most as compared to the other talukas of the district and returned 767 attacks and 315 deaths. The next in order of severity of the epidemic comes Chikodi taluka where the infection was first introduced into Yedur and Manjri villages on the 14th and 17th September 1930 the source of infection being the Krishna.

river. The rivers—Dudhganga and Vedaganga—traversing the taluka were also responsible for infection of some villages in the taluka. The infection in Chinchni village of the taluka was imported from Kolhapur State on the 6th of October. In the remaining villages the infection was due to communication of people with the neighbouring villages of the same taluka. The total number of infected villages in the taluka was 23 with 290 attacks and 139 deaths. In Gokak taluka which was infected on 26th October 1930, the infection was traced to the use of Ghatprabha river water for drinking purposes. The infection in Khanapur and Sampagaon talukas was due to the returning pilgrims from Pandharpur, infection then spread to other villages in these talukas. In Parasgad taluka the infection was traced to Kolhapur State. It can be said that the river Krishna played an important part in disseminating infection in Belgaum District specially in the badly affected talukas of Athni and Chikodi. In all 1,315 attacks and 593 deaths were recorded in the Belgaum District the number of affected villages being 86. Bijapur District was free till the middle of July when the first place to report infection was Chanegaon on the 19th and then Dhulkhed on the 21st July in Indi taluka. The origin of the infection was traced Bevur village in the neighbouring Sholapur District on the other side of the Bhima river. The infection in the Bijapur District was introduced mainly from the Sholapur District, Kurandwad and Akalkot States from the North on the other side of Bhima river and also from Nizam's Territory on the East. The rivers—Krishna and Ghatprabha—played their part in the dissemination of the disease in the district. The total number of villages infected was 201 out of 1,128 in the district. 2,793 attacks and 1,373 deaths were registered in Bijapur District. Indi taluka was worst affected 1,166 attacks and 558 deaths were recorded. Bijapur taluka reported 526 attacks and 247 deaths, Sindgi 292 and 153, Bagewadi 251 and 130 and Bilgi 216 and 92. Bijapur town reported 29 attacks and 22 deaths and Bagalkot 16 attacks and 9 deaths.

During the year under report 6 Medical Officers were appointed on cholera duty—2 each for Belgaum, Dharwar and Bijapur Districts. The total number of persons inoculated against cholera during the year was 31,500. These were performed by the special inoculators appointed for the purpose, Medical Officers in charge of Dispensaries and Mission Hospitals.

Gujarat Registration District was lightly affected with cholera—294 deaths were recorded against 20 in the previous year. Panch Mahals District was badly affected—239 deaths were registered against 14 in 1929. Kaira District reported 36 deaths, Surat 18 and Ahmedabad City reported one suspicious case and death. Broach District was free from the disease. Thirty-four towns and villages were infected. In the Panch Mahals District, Dohad, Jhalod and Kalol talukas were affected and reported 197 attacks and 85 deaths, 144 and 71 and 55 and 37 respectively. Dohad town was severely affected—101 cases and 46 deaths were recorded. The infection in village Kharedi of the Panch Mahals District which was affected on 13th June 1930 was due to scarcity and pollution of water supply; thence it spread to other places. It may be noted that the

labourers are drawn to the Railway works at Dohad from the surrounding villages. This was one of the factors contributing to the dissemination of cholera in Dohad taluka. The Railway authorities were advised not to allow the villagers from infected localities to work till the epidemic totally ceased in the town and the vicinity. In Surat District two talukas—Mandvi and Pardi—were affected and 22 attacks and 6 deaths and 17 attacks and 12 deaths respectively were reported. The cases in Mandvi taluka were indigenous while the source of infection in Pardi taluka was traced to polluted water supply. A case of cholera at Navagam village of Chorashi taluka was reported by the Surat Railway Sub-Assistant Surgeon on the 24th August 1930. The case occurred in the Railway Coolie quarters of the Railway lines about a furlong beyond the Surat City limits. Usual preventive measures were carried out by the Railway Medical Officer. No more cases occurred. The Medical Officer in charge Mandvi Dispensary visited Nanicher village of Mandvi taluka and examined the cases personally. In Kaira District 3 town circles—Borsad, Anand and Umreth—were affected. The rural circles were free from the disease. Borsad town reported 69 attacks and 31 deaths, Anand 4 attacks and 4 deaths and Umreth one attack and one death. The infection in Borsad town was indigenous and it was imported from Borsad into Anand and Umreth towns. One suspicious fatal case of cholera was reported from Ahmedabad City on 15th December 1930. Usual precautionary measures were carried out by the Municipality. No more cases occurred.

One Special Medical Officer on anti-cholera duty was appointed in Dohad taluka from the beginning of August 1930 by the District Local Board, Panch Mahals. 1,210 anti-cholera inoculations were performed in the district and 61 in Surat District. The total number of patients treated with various kinds of treatments was 605.

The Province of Sind was free from cholera during the year under report.

48. *Preventive measures.*—The usual precautionary measures against cholera were carried out in all the affected districts.

Inoculation.—During the year under report 29 Medical Officers were appointed on cholera inoculation duty. Out of these, 11 were detailed for the Western Registration District, 11 for the Central, 6 for the Southern and one for Gujarat.

The total number of persons inoculated against cholera during the year under report was 134,097. These were performed by the special inoculators appointed for the purpose, Medical Officers in charge of Hospitals and Dispensaries, private practitioners and others. Out of the total number of 134,097 inoculations 58,628 were done in the Central Registration District, 42,698 in the Western, 31,500 in the Southern and 1,271 in the Gujarat Registration Districts.

49. *Expenditure on cholera outbreaks.*—During the year under report a grant of Rs. 5,000 was sanctioned by Government for measures against

outbreaks of cholera, e.g. supply of potash permanganate for disinfection of village water supplies, cholera treatments and ingredients for Dr. Tomb's mixture. Out of this sum Rs. 3,268 were spent.

In addition to the above, a total grant of Rs. 34,040 was sanctioned for inoculation against plague, cholera and other epidemics. Pay and travelling allowance of Medical Officers appointed for cholera and plague inoculation duty (Rs. 15,040) and the purchase of anti-cholera and plague vaccine (Rs. 19,000) are the two items of expenditure against the grant.

Dysentery and Diarrhœa:

50. This heading shows an increase on the previous year's figures—26,536 deaths (13,792 males and 12,744 females) against 25,108 in 1929. The mean of the previous five years was 25,745. The death-rate was 1·39 against 1·31 in 1929 and 1·34 the quinquennial mean. When cholera is prevalent the figures under dysentery and diarrhœa always show an increase as the early and very late cases are registered under this heading specially in rural areas where diagnosis is generally not correct.

The number of deaths registered under dysentery and diarrhœa in previous years is as follows :—

Year.	Number of deaths.
1901–1910 mean	52,919
1911–1915 mean	39,455
1916–1920 mean	34,156
1921	26,799
1922	21,118
1923	22,238
1924	28,926
1925	20,643
1926	34,158
1927	25,447
1928	23,371
1929	25,108
1930	26,536

Central Registration District recorded the highest number of deaths 8,907; Western 6,444; Southern 6,339; Gujarat 2,548 and Sind 846 as compared with 7,853; 5,627; 6,708; 2,686 and 1,033.

Bombay City recorded 1,452 deaths equal to a death-rate of 1·26 against 1,201 and 1·05 respectively in 1929.

The urban death-rate for the Presidency as a whole was 1·50 and the rural 1·36, against 1·35 and 1·30 respectively in 1929. The highest death-rates for urban areas were recorded in Sholapur (4·41), Nasirabad (3·53), Bhiwandi (3·53), Ratnagiri (3·34), Borsad (3·30), Baramati (3·19), Pandharpur (3·06), Dharangaon (3·03), Ahmednagar (2·84), Kurla (2·84), Malegaon (2·70), Belgaum (2·60), Gokak (2·50), Surat (2·46), and Jalgaon (2·40).

51. *Dysentery.*—Under this sub-heading 4,024 deaths were registered against 3,967, the death-rate being ·21 against ·21 in 1929. The urban death-rate was ·33 and the rural ·18 against ·30 and ·18 respectively in 1929. The highest death-rates for urban areas were recorded in Borsad (2·81), Ratnagiri (2·74), Kurla (2·53), and Karwar (1·40).

52. Under diarrhœa 22,512 deaths were recorded against 21,141 in 1929. The death-rate was 1·17 against 1·10 in the previous year. The urban death-rate was 1·18 and the rural 1·19 as compared with 1·04 and 1·12 respectively in 1929. The highest death-rates for urban areas were recorded in Sholapur (4·36), Nasirabad (3·53), Bhiwandi (3·20), Baramati (3·19), Dharangaon (3·03), Pandharpur (2·82), Malegaon (2·66), Belgaum (2·49), Gokak (2·40), Jalgaon (2·36), Nagar (2·33), Poona City (2·33), Surat (2·11), Nandurbar (2·10), and Karachi (1·89).

The Assistant Director of Public Health, Southern Registration District, visited Karwar Jail in July 1930 on hearing several dysentery cases occurring there. The first case of dysentery occurred in March. April recorded one case while May was free. In June 2 cases were registered apparently of ameabic type as could be seen from therapeutic test. In July there were 19 fresh cases. The epidemic really started from 23rd of July and rapidly increased till the 15th of August. By the latter half of August the disease declined rapidly as a result of prompt measures taken by the Superintendent of the Jail.

Regarding the origin of the epidemic the Assistant Director of Public Health states :—

> " In this connection it must be remembered that dysentery generally prevails in more or less endemic form in the Kanara District during the monsoon particularly in the below-ghat talukas of Ankola, Kumta, Bhatkal, and Honawar. " Satyagraha " prisoners were received into the Jail from Ankola and other places increasing the monthly average convicts strength in the Jail from 50 to 76 in April and May to 120, 129 and 181 in June, July and August respectively, thus overcrowding which, under the present circumstances, is perhaps unavoidable, played its part and so did the prevailing weather conditions. The articles of diet for the prisoners were carefully gone into but were not found to be a contributing factor. In the absence of facilities for making necessary cultures from stools to clinch carrier cases and in view of the endemicity of the disease in the district with overcrowding to help in its spread and the localised nature of the outbreak there is little doubt that undetected carrier or carriers served as source of infection to others. It is pleasing to note the interest taken by the Civil Surgeon and Superintendent of the Jail in preventive work generally."

53. In Appendix II, a table is given showing the effect on the death-rate by the introduction of a piped water supply. It will be noticed that the mean death-rate from cholera and dysentery and diarrhœa for the years succeeding installations of water works, ending with the year under report shows great improvement over that for the quinquennial mean preceding the introduction of a piped supply in practically all the towns.

Plague.

54. Plague was less prevalent in the Presidency this year showing a decrease of 12,988 over the figures for last year. The mortality was in fact the lowest since the introduction of the disease in the Presidency (with the exception of 1921 and 1927), 5,026 deaths being registered equal to a death-rate of ·26 as contrasted with 18,014 deaths with a death rate of ·94 in the preceding year.

The total number of deaths recorded in each year since 1903 is given below :—

Year.	Number of deaths.	Year.	Number of deaths.
1903 ..	181,269	1917 ..	162,874
1904 ..	223,957	1918 ..	79,478
1905 ..	71,363	1919 ..	9,626
1906 ..	51,525	1920 ..	13,857
1907 ..	93,609	1921 ..	4,672
1908 ..	27,345	1922 ..	8,379
1909 ..	24,316	1923 ..	33,741
1910 ..	25,043	1924 ..	9,214
1911 ..	100,399	1925 ..	12,601
1912 ..	28,984	1926 ..	9,866
1913 ..	25,288	1927 ..	4,076
1914 ..	20,060	1928 ..	13,563
1915 ..	43,824	1929 ..	18,014
1916 ..	79,507	1930 ..	5,026

The distribution of plague given in Annual Form No. XII shows that the worst affected district was Dharwar with 2,064 deaths or a ratio of 1·96 per 1,000 of population. Next comes Belgaum with 1,220 deaths equal to a death-rate of 1·28. Other badly affected districts were Satara 467 deaths or a death-rate of ·46 ; Bijapur 368 (·46), and Kanara 141 (·35). Ratnagiri recorded 209 deaths, Sholapur 190, Poona 114 and Thana 165. East Khandesh, West Khandesh and Kolaba districts were quite free. Nasik district returned 32 deaths, Bombay Suburban 10 and Ahmednagar 12. Bombay City recorded 20 deaths from plague as compared with 29 in the previous year.

The highest death-rates for urban areas were recorded in Chiplun (10·45), Baramati (7·39), Bagalkot (5·96), Athni (3·32), Bhiwandi (2·13), Barsi (1·68), Vengurla (1·57), Gokak (1·40), Karwar (1·33) and Kumta (1·33).

55. By Registration districts their history is as follows :—

In the Southern Registration district 3,763 deaths were registered during the year under report against 9,549 during 1929. The death-rate per 1,000 of population was 1·18 as against 3·00 in 1929 and a quinquennial mean of 1·66. The rural death-rate (1·23) was considerably higher than the urban one (0·79). The heaviest incidence occurred in the Dharwar district with 2,034 deaths as against 5,541 in 1929 ; Belgaum district which registered 1,220 deaths stood next in rank. Of the 62 circles in the Division 45 were infected. 357 villages out of the total number of 4,738 were affected as also all rural circles in

the Belgaum and Dharwar districts. In the Bijapur district all rural circles except Hungund, Sindgi, Bilgi and Indi and in Kanara the rural circle of Mundgad, Halyal, Sirsi, Yellapur and Karwar were affected but the recorded mortality was comparatively low as compared to other two districts. Bankapur (8·68), Gadag (3·27) and Dharwar (3·32) rural circles of the Dharwar district; Khanapur (2·51) and Belgaum (2·27) rural circles of the Belgaum district; Bagalkot (2·23) rural circle of Bijapur district and Mundgad (2·19) rural circle of Kanara district returned the high mortality rates. Among the town circles Bagalkot and Athni were badly affected returning death-rates of 5·96 and 3·32 respectively. The epidemic was prevalent throughout the year in this Division the highest mortality having been recorded in January. The mortality curve which was declining from its highest peak in January reached the lowest point in May and then there was a regular rise till December.

Inoculation was the sheet anchor of plague preventive measures that was fairly freely resorted to by the public in general. People came forward for inoculation without any objection anywhere in the Division. Inoculation work was carried on by the Taluka Dispensary Medical Officers and Special Inoculators appointed for the purpose. Co-operation of private Medical Practitioners was secured by the Local Bodies wherever possible for this work both in the Urban and Rural areas offering them some honorarium and supplying them anti-plague vaccine free of charge. The Belgaum District Local Board also utilised the services of the Red Cross Medical Officer in charge of the Travelling Dispensary. In the Dharwar district the Medical Officer of Health of the District Local Board and the Subordinate Medical Service Officer under him carried on the inoculation work in addition to the Dispensary Medical Officers and Special Inoculators. At Bagalkot town the Municipal Sanitary Inspector and Local Medical Practitioners rendered valuable assistance to the Municipality during the epidemic in the town in popularising and pushing on inoculation work. Sufficient stock of vaccine was kept ready in the District Local Board Offices and it was supplied to the Medical Officers immediately on receipt of a requisition from them. Government Inoculators indented for anti-plague vaccine from the Haffkine Institute, direct according to their requirements. Evacuation and systematic rat destruction were resorted to by the public and local bodies respectively in some cases. Printed leaflets in vernacular giving detailed instructions regarding preventive measures to be taken were sent to village officers and Mamlatdars on receipt of intimation of outbreak from a village. Mamlatdars were advised to send the Dispensary Medical Officers to the affected villages for carrying on inoculation work. The Assistant Director of Public Health paid special visits to 20 plague affected places during the year in connection with plague epidemic and inspected the infected localities at these places with the Presidents of the Municipalities and other local authorities concerned and advised preventive measures. He arranged for magic lantern demonstration on plague at Kumta by the Inspector of Sanitation

and Vaccination, Kanara Southern Division, with the help of the Municipality. Similar demonstrations were given in two more places. As a measure of preventing the spread of plague, weekly bazaars at Nipani and Athni towns and at Shiggaon in Bankapur taluka were shifted outside the towns.

The total number of persons inoculated against plague during the year under report was 89,098. Out of these 49,593 were in Dharwar district, 18,844 in Belgaum, 13,128 in Bijapur and 7,533 in Kanara. Of the total number of inoculations, 20,400, 5,671 and 1,018 were performed by the Special Plague Inoculators appointed in the districts of Dharwar, Belgaum and Bijapur, respectively and 5,156 by the District Local Board Subordinate Medical Service Officers in Dharwar District. Private Medical Practitioners in Byadgi of Ranebennur taluka and Bagalkot town did useful work in combating the disease in their respective towns and performed 2,418 and 7,062 inoculations respectively. Out of the total number 18,844 were performed by the private Medical Practitioners in the different districts of the Division.

Three inoculators in the Belgaum district and 4 in Dharwar who were entertained during the latter part of 1929 continued to work during this year. In addition to the above, two inoculators were appointed and posted to Dharwar district. Services of two of the inoculators appointed for cholera duty in the Dharwar and Bijapur districts were utilized for plague duty also.

Ratting operations were carried on by the following Municipalities during the year for the periods and with the results mentioned against each :—

Name of place	Population	Period of trapping		Daily average of traps
		From	To	
Belgaum ..	36,214	Whole year ..		722
Nipani ..	11,878	Do. ..		120
Ranebennur ..	13,930	4th October 1930.	30th November 1930.	30
Hubli ..	69,140	9th October 1930.	21st November 1930.	167
Gadag ..	41,158	5th September 1930.	31st December 1930.	400
Haliyal ..	4,455	10th April 1930 .	15th December 1930.	40
Bijapur ..	32,471	Whole year ..		250
Bagalkot ..	19,471	6th October 1930.	31st December 1930.	131
Shiggaon (Panchayat Committee).	4,811	4th October 1930.	2nd November 1930.	70

Name of place	Rats				Remarks
	Caught	Examined	Infected	Killed	
Belgaum ..	41,236	14,154	..	41,236	
Nipani ..	21,015	....	..	21,015	
Ranebennur ..	237	100	..	237	
Hubli ..	7,014	....	..	7,014	
Gadag ..	20,505	114	..	20,505	
Haliyal ..	1,763	100	14	1,763	
Bijapur ..	13,461	80	..	13,461	
Bagalkot ..	16,604	....	..	16,604	
Shiggaon (Panchayat Committee).	285	....	..	285	
Total ..	122,120	14,548	14	122,120	

It will be seen from the above statement that a total number of 122,120 rats were caught and destroyed during the year in 8 towns and one village Panchayat Committee. These operations were carried out throughout the year in Belgaum, Nipani and Bijapur towns and in the remaining ones they were undertaken when the epidemic actually prevailed, thus not taking full advantage of the measure in time.

Poison baits of Barium Carbonate were made use of in Belgaum and Bijapur towns during the year and 56,096 and 18,259 baits respectively were distributed in these towns for the destruction of rats with the result that the towns of Belgaum and Bijapur escaped with only 3 and 2 deaths respectively during the year.

The Central Registration District was lightly affected with plague, only 992 deaths being recorded against 6,746 in 1929, the death-rate was 0·21 against 1·46 in the previous year. Out of 992 total plague deaths in the Central Registration District, nearly half the number of deaths (467) occurred in Satara district alone as against 4,875 in 1929. In Ratnagiri district 209 deaths occurred while Sholapur and Poona returned 190 and 114 deaths respectively. Ahmednagar district recorded only 12 deaths from plague. The highest number of deaths (370) were recorded in the month of January and the epidemic became milder during the following months till the lowest (4) was reported in September. From October it again slowly increased. Out of 5,868 villages, only 114 reported deaths. The epidemic was of a mild type; out of 1,397 attacks 992 died.

In Satara district plague was prevalent in 71 villages and towns out of the total of 1,341. Jawli taluka, Satara, Karad and Islampur were free. The total number of attacks was 698 of which 467 died. Amongst the rural circles the highest mortality was recorded in Shirala petha, which was quite free from the epidemic in 1929, next in order come Walwa and Patan respectively. As is usually the case in plague epidemic more females have died than males, i.e. in this district 279 females succumbed as against 188 males. Only one death was reported from Wai town. Other town circles in the district were free from the disease. Out of 190 deaths in the Sholapur district, the highest number of deaths (130) was returned by Barsi taluka. Sholapur and Pandharpur talukas were free from the disease. Barsi town carried over infection from last year and reported 37 deaths. In Ratnagiri district out of 11 rural circles only 5 were affected, the highest number of deaths 34 occurred in Dapoli taluka. Out of 209 deaths, no less than 115 were reported by Chiplun town alone of whom 29 were males and 86 females. Vengurla town reported 30 deaths, of which 29 occurred from January to April and one in August. In Poona district 3 rural circles were affected, viz. Purandhar, Bhimthadi and Indapur. Out of 114 deaths, 88 were returned by Baramati town alone of whom 51 were males and 37 females. In Ahmednagar district only 12 deaths occurred in Karjat village in the same taluka. The rest were free. The infection was imported from Baramati town where plague was prevalent at that time. There is a regular communication between the two places and there is also motor service.

16,882 persons were inoculated during the year, the largest number 6,273 being in Sholapur district. Ratnagiri district recorded 4,552, Poona 3,222, Satara 2,377 and Ahmednagar 458. Of these, 8,757 were performed by the special inoculators appointed for the purpose and 8,125 by the Medical Officers in charge of Dispensaries. Seven inoculators were employed in this Division except Ratnagiri district, where plague inoculations were performed by the Taluka Dispensary Officers to whom outfits and vaccine were supplied.

Notes on simple precautions to be adopted by individuals in the case of a threatened epidemic of plague were forwarded to all Collectors, Presidents of District Local Boards etc. in this Division. The Assistant Director of Public Health, Central Registration District, visited Dhandeghar, Panchgani and Mahableshwar in company with the Director of Public Health, enquired into the outbreaks and made arrangements for inoculations as well as baiting and trapping. He also interviewed the Superintendent of Mahableshwar in connection with plague preventive measures and systematic rat-trapping at Malcolmpeth.

Ratting Operations.—From the statement it will be seen that a total number of 152,822 rats were caught in 8 towns, the largest number (63,241) being in Sholapur City. These operations were carried out

throughout the year in the Municipal towns of Sholapur, Barsi, Pandharpur, Satara and Panchgani—

Name of Municipality	Period		The daily average number of traps used	Number of rats caught
	From	To		
Poona City ..	1st January 1930. and 1st November 1930.	15th May 1930 and 31st December 1930.	500	30,424
Sholapur ..	Throughout the year ..		693	63,241
Barsi ..	Do. ..		118	56
Pandharpur ..	Do. ..		200	27,300
* Satara ..	Do. ..		250	16,506
† Panchgani ..	Do. ..		80	4,575
‡ Ahmednagar ..	Except June, July & August		61	6,882
Wai ..	1st October 1930 to 31st January 1931.		50	3,838
		Total ..	1,952	152,822

Name of Municipality	Number of rats examined	Number of rats infected	
Poona City ..	3	*Nil*	
Sholapur ..	9	,,	
Barsi ..	....	,,	
Pandharpur ..	2	,,	
* Satara ..	3	,,	* This Municipality has been encouraging rat-trapping by advertising prizes of one anna per rat and in this way 2,351 were caught and destroyed.
† Panchgani ..	2	,,	† 207 dead rats were found on account of poison baits used.
‡ Ahmednagar ..	....	,,	‡ 21,285 dead rats were found on account of 500 poison baits used daily.
Wai ..	....	,,	
Total ..	19	....	

In the Western Registration District 207 deaths were recorded from plague in 1930 against 1,597 in 1929 and 1,360 the mean of previous five years. 165 deaths were registered in Thana district, 32 in Nasik and 10 in Bombay Suburban. East Khandesh, West Khandesh and Kolaba districts were free from the disease. In Thana district, plague was prevalent throughout the year except June and November. Nine talukas were affected and 25 villages reported deaths. Bhiwandi town reported 26 deaths and Kalyan 15 deaths.

Only 1,186 inoculations were performed—Thana 656, Nasik 242 and Bombay Suburban 288.

In the Western Registration District ratting operations were carried out in the Municipal towns of Malegaon and Dhulia throughout the year and 13,152 and 29,621 rats were caught and the daily average number of traps used being 111 and 420 respectively. The rats caught were not examined.

Surat was the only Collectorate that was affected with plague in the Gujarat Registration District. In all, there were 72 cases and 44 deaths in 1930, against 160 and 92 in 1929. Only Pardi taluka of Surat district was affected and reported 70 cases and 43 deaths. Bulsar town reported 2 attacks and one death from plague. Only 2 villages of Pardi taluka were affected. In Pardi town first case occurred on 16th April 1930. After a lapse of nearly two months, fresh cases began to occur, and the infection lingered on till the end of the year. 65 cases and 40 deaths were reported from the town during the year. The house in which the first case occurred during April 1930 and the adjoining houses together with those where dead rats were found were disinfected. The inmates of the affected houses evacuated and went to live in grass huts outside the town. General cleanliness was well attended to by the Sanitary Committee and inoculation against plague was pushed on at that time with the result that the infection became dormant. Regular rat trapping was advised to the local body but it was not attended to; consequently there was a recrudescence of the outbreak in June. Arrangements were then made by the Sanitary Committee to adopt the precautionary measures. Leaflets in that connection were distributed. The Assistant Director of Public Health paid a special visit to Pardi town and got measures organised in different parts of the town. The first case in Baldha village of Pardi taluka occurred on 13th October 1930. It was reported that infection was imported from Pardi town.

1,755 inoculations were done in Surat District.

Sind Province was entirely free from plague as was the case last year. Regular ratting campaign was carried on by the Municipalities of Karachi, Hyderabad, Larkana, Mirpurkhas and Tando Adam. The number of rats caught in these towns totalled 133,111 as against 130,844 in the preceding year.

Ratting Operations.—In Bombay City a determined rat campaign was carried out, 599,292 rats were caught and destroyed. Out of these

273,476 were examined and 691 found to be plague infected. The daily average number of traps used was 518.

At the instance of the Assistant Director of Public Health, Central Registration District, plague preventive measures such as systematic ratting operations, poison baiting etc. were carried out by the Barsi Municipality during the year under report. Similar measures were adopted by the Satara District Local Board in plague-infected areas.

56. *Anti-plague Measures.*—During the year under report the services of Special Medical Officers appointed on cholera inoculation duty were also utilised for plague inoculation work.

Inoculation.—The total number of persons inoculated during the year under report was 145,349. These were performed by the special inoculators appointed for the purpose, Medical Officers in charge of Hospitals and Dispensaries and private practitioners and others. Out of these 109,400 were performed in British Territory and 35,949 in Indian States.

The total number of persons inoculated in each year since 1914 is given below :—

Year	Number of inoculations	Year	Number of inoculations
1914 ..	62,497	1923 ..	145,395
1915 ..	128,800	1924 ..	60,327
1916 ..	211,907	1925 ..	60,831
1917 ..	241,139	1926 ..	84,900
1918 ..	36,571	1927 ..	56.171
1919 ..	28,307	1928 ..	132,340
1920 ..	49,117	1929 ..	423,260
1921 ..	39,208	1930 ..	145,349
1922 ..	73,098		

By districts, the number of operations was 49,593 in Dharwar, 18,844 in Belgaum, 13,128 in Bijapur, 7,533 in Kanara, 6,273 in Sholapur, 4,552 in Ratnagiri, 3,222 in Poona, 2,377 in Satara, 1,755 in Surat, 656 in Thana, 458 in Ahmednagar, 288 in Bombay Suburban and 242 in Nasik district.

In Bombay City, 231 inoculations were performed, 31,036 in Kolhapur and Southern Maratha Country States and 4,913 in Satara Agency. 248 inoculations were performed in Bijapur (194) and Karwar (54) Prisons.

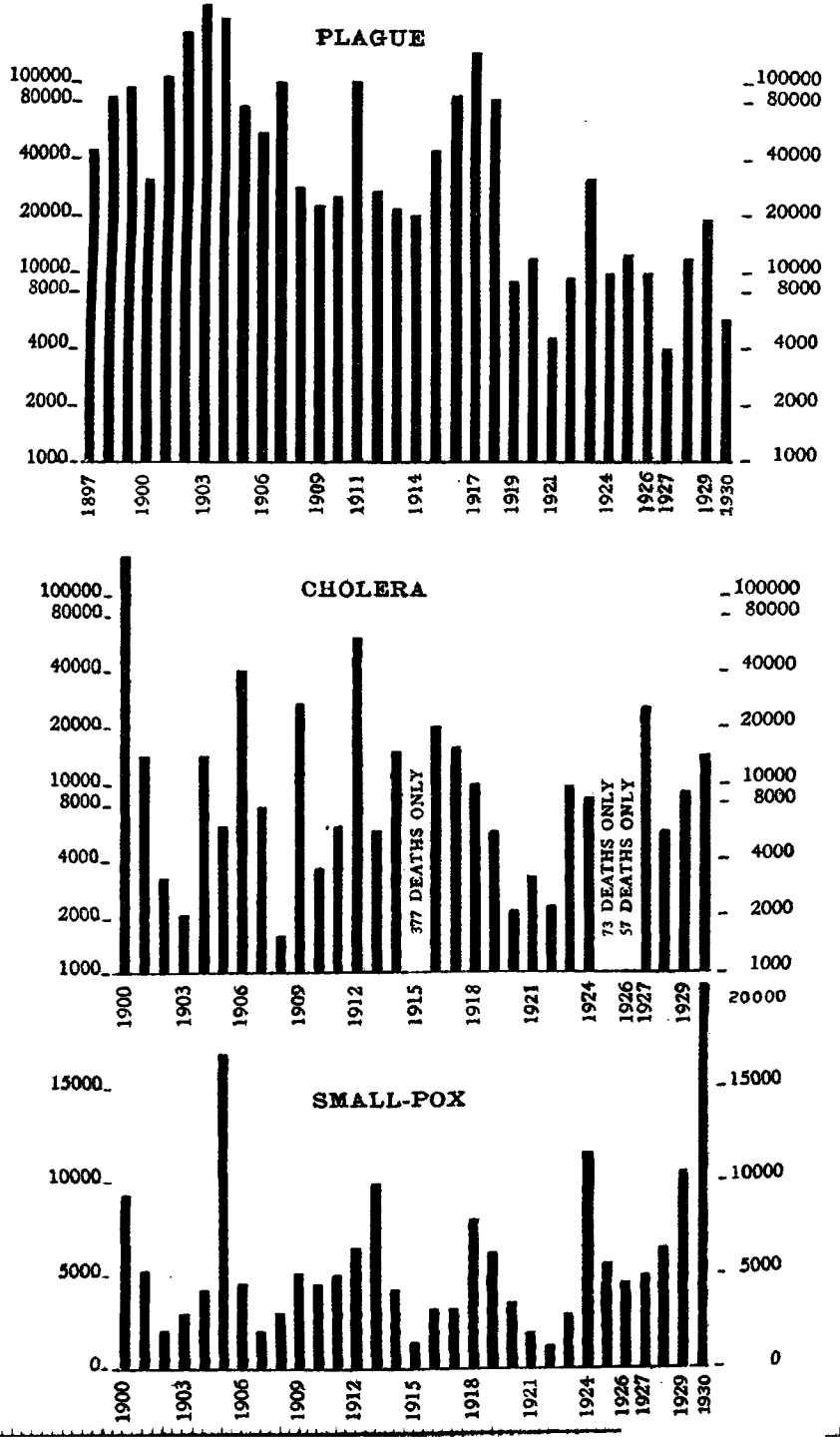
Small-pox.

57. The small-pox epidemic of 1930 foreshadowed in the previous year proved the severest. The total deaths recorded during the year under report numbered 21,341 (10,573 males and 10,768 females) against 10,635 in the previous year and 6,111 the mean of previous five years. The death-rate was 1·11 per mille of population against ·56 in 1929 and ·32 the quinquennial mean. The urban death-rate was 1·80 and the rural ·95. Urban areas suffered worse than rural.

CHART IV

ANNUAL INCIDENCE OF DEATHS FROM EPIDEMIC DISEASES

Scale figures represent actual deaths for Plague and Cholera. Figures are at their log : intervals and only those above 1000 are shown.



The annual mortality for previous years is given in the following table :—

Year	Number of deaths
1901–1910 mean	4,962
1911–1920 ,, ...	5,074
1921	1,771
1922	1,170
1923	2,811
1924	11,151
1925	5,644
1926	3,922
1927	5,091
1928	5,265
1929	10,635
1930	21,341

Distribution.—Detailed figures are given in Annual Form No. VIII.

While the epidemic was severe in practically all Collectorates (except Sind), those of the Western Registration District were as in the previous year mainly affected. Thus East and West Khandesh reported 5,628 and 2,499 deaths or ratios of 5·23 and 4·08 respectively, and the ratios in Nasik, Kolaba, Thana and Bombay Suburban were ·91, ·80, ·77 and ·23. The Gujarat Registration District was also very badly affected. Broach showed a ratio of 3·00 per mille of population, Surat 1·95, Ahmedabad 1·80, Kaira 1·20, and Panch Mahals 1·07. Other excessive rates were Poona (1·40), Ahmednagar (0·51), Satara (0·48), Sholapur (0·40) in the Central Registration District and Bijapur (0·52), Belgaum (·40), and Kanara (·34) in the Southern Registration District. Bombay City showed a considerable increase in mortality from small-pox. 1,671 deaths were registered against 1,126 in 1929, and 595 in 1928. The death-rate was 1·45 per 1,000 of population as compared with ·98 in 1929 and ·63 the quinquennial mean.

289 registration circles with 3,808 villages were infected.

The highest urban death-rates were recorded in Erandol (8·72), Ankleshwar (8·59), Poona City (6·59), Nadiad (6·42), Broach (6·17), Bhiwandi (6·15), Dharangaon (5·94), Viramgaon (5·75), Surat (5·48), Bulsar (5·28), Ahmedabad Cantonment (5·16), Dohad (5·10), Chopda (4·67), Dakore (4·63), Malegaon (4·47), Dholka (4·15), Anand (3·36), Nandurbar (3·18), Borsad (3·14), Ahmedabad (3·13), Dhulia (2·99), and Hyderabad (2·49).

Of the 21,341 deaths from small-pox, 6,733 were of infants under one year and 10,849 of children between one and ten years of age.

95 per cent. of the mortality occurred during the first six months of the year. February was the month of greatest severity and 5,513 deaths were recorded. Small-pox year normally begins about October-November and reaches its full in March or April and then declines.

58. The following is a short summary for each Registration District :—

The heaviest incidence occurred in Western Registration District, with 9,943 deaths ; Gujarat 5,094 ; Central 2,908 ; Southern 1,216 ; and Sind 509 as compared in that order with 5,144 ; 1,171 ; 1,595 ; 852 ; and 747 in 1929.

In the Western Registration District there were 9,943 deaths from small-pox against 5,144 in 1929 and 1913 the mean of previous five years. The death-rate was 2·49 against 1·29 in 1929 and ·48 the quinquennial mean. Out of 89 registration circles, 82 were infected, while out of 7,501 villages, 1,956 reported deaths. Of the 9,943 deaths, 3,334 were of infants under one year and 5,748 between one and ten years of age. February was the month of greatest severity 2,824 deaths having been recorded.

As a pandemic of small-pox was apprehended, mass vaccination was resorted to. The following number of temporary Vaccinators was appointed :—

East Khandesh 10, West Khandesh 4, Thana 4, Kolaba 3 and Nasik 2. Besides this, 18 temporary Vaccinators were appointed by different Municipalities in the Western Registration District.

Vaccinations were performed in Institutions, Distilleries, Mills, Police Lines and Schools. The Medical Officer of Health, Dhulia, delivered 20 lectures with the aid of magic lantern. The Sanitary Association, Dhulia, offered rewards in the shape of medals to the volunteers who brought children for vaccination. Mr. M. G. Pandit, who was appointed a Propaganda Officer, delivered 17 lectures at different places. His lecture at Shirpur in West Khandesh District was attended by the Assistant Director of Public Health, and necessary instructions were given to him.

The Assistant Director of Public Health, Western Registration District, remarks :—

"The propaganda work thus carried out was of considerable help in inducing people to be vaccinated and re-vaccinated. The most powerful incentive for adopting preventive measures is the presence of an epidemic ; but even at such times propaganda work is necessary. At ordinary times, when there is no epidemic, people forget the dangers to which they were liable from infectious diseases and pay little attention to preventive measures. The periodicity of small-pox is explained by apathy of the public in non-epidemic times. As soon as the majority of the population is protected by immunity acquired from the disease or vaccination the epidemic dies down. For the next few years, the number of unprotected persons gradually increase and then the epidemic flares up again. It is in inter-epidemic times that propaganda work is especially needed. In spite of all this, it must be admitted that the public in general are alive to the protection conferred by vaccinations and number of 'conscientious objectors' is rapidly decreasing. Same, however, cannot be said with regard to re-vaccination. The unfortunate belief has got abroad that vaccination in childhood confers life long protection. People expect of vaccination what small-pox itself cannot do. During the epidemic of 1930, a fairly large number of re-vaccinations were performed and necessity of re-vaccinations was brought home to the public by this epidemic in which many adults were attacked with small-pox."

The following case is reported of being of unusual interest :—

"In the Railway Workshop at Bhusawal, a boy was reported to be suffering from small-pox. He was not vaccinated in his childhood but had had small-pox in infancy. He fell ill on 17th January 1931. He had all the usual symptoms headache and fever and pains in the back. Eruption made its first appearance on 19th January 1931 and it was visible first on forehead and then on face, hands, body and legs. The eruption was discrete and illness was not severe. The patient was up on 25th January 1931 but he felt rather weak. This case was undoubtedly one of the rare cases of second attack of small-pox. Diagnosis was based on centrifugal distribution, characteristic symptoms and an interval between onset and the day of eruptions ; one of the characteristic of small-pox which is not often described in text book, i.e. pocks are found in pairs, was also present in this case.

"The vaccination campaign on account of the expected pandemic was continued and vaccination staff was increased. In spite of all this the mortality from small-pox was nearly twice as much as last year and it may safely be asserted that it would have been much greater but for the fact that a sustained effort on vaccination and re-vaccination on a large scale was carried on throughout two years in succession."

Next to Western, Gujarat Registration District was badly affected. There were 5,094 deaths from small-pox against 1,171 in 1929. The epidemic of small-pox broke out in Gujarat in the month of December 1929 and assumed a serious form in the following month. All the registration circles were affected and out of 3,283 villages, 666 reported deaths. February was the month of greatest severity—1,430 deaths were recorded. Of the 5,094 deaths from small-pox 1,770 were of infants under one year and 2,627 of children between one and ten years of age.

All the districts were affected. Broach District recorded the highest death-rate (3·00) while Panch Mahals the lowest (1·07).

Mass vaccination was carried out especially in large Municipalities. The services of the Vaccination Propaganda Officer were utilized to demonstrate to the public the good effects of vaccination against small-pox by lectures and magic lantern shows.

The following extra Vaccinators were appointed :—

Two for Surat City and one each for Bulsar and Godhra towns and Surat and Broach districts. In the Municipal towns of Surat, Broach and Ahmedabad services of private medical practitioners who volunteered for vaccination work, were utilised.

Next to Gujarat, Central Registration District was badly affected. There were 2,908 deaths from small-pox against 1,595 in 1929 and 1,277 the mean of previous five years. The death-rate was 0·63 against 0·34 in 1929 and 0·27 the quinquennial mean. 68 registration circles with 698 villages were infected. Out of 2,908 deaths from small-pox 794 or 27 per cent. occurred among infants under one year, 1,157 or 40 per cent. between one and ten years of age and the remaining 957 or 33 per cent. above ten years of age. 2,617 deaths were recorded in the first

half of the year and only 291 in the latter half. February was the month of greatest severity, 682 deaths having been recorded. Mass vaccination campaign continued till the end of June.

Small-pox prevailed in a rather severe form in the Southern Registration District, during the year under report registering 1,216 deaths as compared to 852 deaths during the preceding year, the death-rate being 0·38 against 0·27 in 1929 and a quinquennial mean of 0·21. The disease which reached its lowest point in October 1929 showed a gradual increase in mortality and reached its highest point in March 1930 recording 210 deaths. It became milder during the following months till the lowest number (21) was recorded in October 1930. Out of the total deaths, 331 were of infants under one year and 502 of children between one and ten years of age. Out of 62 registration circles 54 were affected. Deaths were reported from 380 villages out of the total number of 4,738, Bijapur Collectorate was badly affected among the four districts of the Division and returned 391 deaths equal to a ratio of 0·49 per mille of population. All rural and town circles were affected, the highest mortality ratios of 2·19 and 1·30 having been recorded in the Bijapur town and Bijapur rural circle respectively. In the Belgaum District all rural circles and 105 villages out of 1,069 were infected recording a total number of 379 with a ratio of 0·40. Among the rural circles the highest ratio of 0·85 was returned from each of the Belgaum and Chikodi circles. Chandgad rural circle recorded 0·77. In the Dharwar District, out of 18 registration circles 17 were affected ; 109 villages out of 1,277 villages reported deaths. 306 deaths were registered with a ratio of 0·30, the highest mortality having been recorded in the month of March. All rural and town circles except Navalgund were affected. Kod rural circle and Gadag-Bettigeri town returned the high mortality rates of 0·88 and 0·90 respectively. The lowest mortality of 140 was recorded in Kanara District giving a ratio of 0·35. All rural circles except Siddapur and Supa were affected, of which Ankola suffered heavily and was responsible for 108 deaths with a ratio of 2·93. Eleven registration circles and 34 villages were affected. Extra Vaccinators were entertained where needed. The Assistant Director of Public Health, during the course of his tour, visited small-pox affected areas and discussed with the local bodies and Municipalities preventive measures to be taken in combating the epidemic. As a result of the suggestions made by him anti-small-pox committees were formed in some of the Municipal towns to carry on the work of fighting the apprehended pandemic of small-pox with the advice of the Dispensary Medical Officers in the towns.

In Sind, 509 deaths were registered against 747 in 1929. Of the 509 deaths from small-pox, 56 were among infants under one year, 115 between one and ten years and the remaining 338 above ten years. Of 5,134 towns and villages in Sind, 88 were affected by small-pox. In Karachi City 79 deaths were reported against 309 in the preceding year. All necessary precautions were taken to combat the disease by the Municipality. Special temporary vaccination stations were opened in different wards of the City. Public were vaccinated in their houses free of cost.

Every school was examined to find out unprotected children and to get them vaccinated. The infected houses were disinfected. In Hyderabad town, there were 181 deaths against 24 in 1929 and 7 in 1928. The Health Officer, Hyderabad Municipality, says in his report that the necessary special measures were taken to put a stop to the further spread of the disease.

In Sind the Officers of this Department enquired into the vaccinal state of 1,769 cases of small-pox with the following results :—

Out of 243 cases which occurred in the population below one year of age, 13 were among vaccinated and 230 among unvaccinated and in the population over one year and below 14 years of age, out of 1,064, 198 were among vaccinated and 866 among unvaccinated persons. In the population over 14 years of age, out of 462, 203 were among vaccinated and 259 among unvaccinated. Out of the total of 414 cases among vaccinated, only 34 died whereas among the unvaccinated out of 1,355, 467 died; the percentage of deaths among vaccinated and unvaccinated being 8 per cent. and 34 per cent. respectively.

59. In accordance with Government Resolution, General Department, No. P. 61, dated the 29th January 1929, the following short summary of small-pox cases treated at the various Hospitals in the Presidency is given :—

During the year under report 438 cases of small-pox were treated at the Civil Hospitals and Epidemic Diseases Hospitals in the Presidency as against 322 in the previous year. Of the cases treated 210 had been vaccinated as against 153 in the year previous while 32 as against 16 in the previous year were stated to have been successfully vaccinated but no vaccination cicatrix could be seen. 175 cases were unvaccinated against 149 in the preceding year. The Infectious Diseases Hospital, Poona, treated the largest number—227 as against 93 in the previous year; next comes the Epidemic Diseases Hospital, Karachi, which treated 59 cases as against 164 in the year previous.

Injuries.

60. There were 7,645 deaths recorded from Injuries of which 4,307 were among males and 3,338 among females. The number registered in 1929 was 8,277 while the quinquennial mean was 7,907.

The annual mortality for previous years under this heading is as follows :—

Year	No. of deaths
1901–10 mean	6,879
1911–20 „	7,725
1921	7,888
1922	7,810
1923	7,514
1924	7,374
1925	7,754
1926	7,672
1927	7,873
1928	7,959
1929	8,277
1930	7,645

From the above table it will be seen that this definite cause of death which is free from most errors of registration, varies but little from year to year.

61. Further comparisons arranged under various heads are set forth in the following table :—

	1930			1929		
	Male	Female	Total	Male	Female	Total
Drowning	1,115	1,619	2,734	1,137	1,696	2,833
Poisoning	121	40	161	136	58	194
Hanging	163	63	226	179	85	264
Wounding	1,322	624	1,946	1,306	548	1,854
Wild Beasts	23	10	33	31	5	36
Snake-bite	881	488	1,369	930	584	1,514
Rabies	95	48	143	109	57	166
Railway Accidents ..	76	18	94	88	22	110
Other Causes	511	428	939	792	514	1,306
Total ..	4,307	3,338	7,645	4,708	3,569	8,277

62. *Snake-bite Deaths.*—1,369 deaths were attributed to snake-bite against 1,514 in 1929. The highest number occurred in Ratnagiri District, viz. 253 against 297 in 1929. Next in order were Thana 173, Satara 102, Thar and Parkar 73, West Khandesh 52, Ahmedabad 52, Kolaba 51, Hyderabad 50 and Nasik 48. Ratnagiri, Thana, Satara, Kolaba, Ahmedabad and Thar and Parkar headed the list last year. In the Southern Registration District, 122 deaths from snake-bite were reported during the year under report. 89 of these were males and 33 females. 97 deaths were enquired into. In 31 cases the snake was identified as Cobra and the interval between the bite and death varied from 1 to 13 hours. In the Gujarat Registration District, 166 deaths from snake-bite were reported against 248 in 1929. Of these, 57 deaths were caused by "Krait" and 21 by "Cobras"; in the case of the rest the species were not identified. The period during which the victim was alive after the bite varied from a few minutes to 30 hours in the case of "Krait" and from a few minutes to 18 hours in the case of "Cobras".

63. *Rabies.*—143 deaths were reported under this heading against 166 in the previous year. Satara District recorded the highest number of deaths, 12 as last year, Sholapur 11, Nasik 10, East Khandesh 10. Sholapur town reported 6 deaths, Bagalkot 5, Hyderabad 5 and Ahmedabad 4.

In the Southern Registration District, 118 deaths were reported as due to murders. Belgaum District recorded 57, Dharwar 33, Bijapur 26 and Kanara 2.

64. Suicidal deaths show a decrease—605 (342 males and 263 females) against 633 (364 males and 269 females) in the previous year. Details of the districts showing the larger numbers are as follows :—

District	Drowning	Poisoning	Hanging	Wounding	Railway	Total
Bombay City	11	51	5	11	3	81
Belgaum	41	..	33	2	..	76
Dharwar	14	..	38	..	..	52
Bijapur	23	1	30	..	..	54
Sholapur	8	20	13	1	..	42
Satara	17	5	17	1	..	40
Thana	4	4	24	1	..	33
Poona	15	10	4	..	..	29

Other Causes.

65. Under this heading a number of deaths due to causes which are not included under the tabulated headings are recorded ; these are, for instance, debility, old age, rheumatism, etc., also deaths which owing to the ignorance of the village registrar are not properly classified.

It covers ordinarily about one-fourth of the total deaths and its numerical importance in the mortality tables, therefore, comes second to Fevers which is also a general term. It is subject to less fluctuation than other headings. For these reasons it presents a reliable index to the general health of the community when compared for several years.

167,361 deaths (83,525 males and 83,836 females) were registered against 167,604 in 1929 and 157,107 the mean of previous five years. The death-rate was 8·73 against 8·75 in 1929 and a quinquennial mean of 8·20.

The annual mortality for previous years is as follows :—

Year	No. of deaths	Ratio per mille
1901–1910 mean ..	140,618	7·61
1911–1915 „ ..	144,911	7·40
1916–1920 „ ..	164,773	8·41
1921 ..	134,263	7·01
1922 ..	130,766	6·82
1923 ..	140,154	7·31
1924 ..	159,008	8·30
1925 ..	140,053	7·31
1926 ..	166,069	8·67
1927 ..	149,745	7·81
1928 ..	162,062	8·46
1929 ..	167,604	8·75
1930 ..	167,361	8·73

66. Deaths during child-birth—which is one of the sub-heads of other causes—show a decrease from 4,987 in 1929 to 4,601 during the year under report. For the Western, Central, Southern, Gujarat and Sind Registration Districts the total deaths were 847, 995, 1,007, 581, and 985, as compared with 830, 1,129, 946, 590, 1,298, respectively in the previous year. In Bombay City 186 deaths were recorded during the year against 194 in 1929.

Taking the Presidency as a whole, 1 woman was reported to have died at child-birth to every 156 live-births as compared with 1 per 147 in 1929. The urban and rural figures were 1 per 91 and 182 respectively as compared with 81 and 173 in the preceding year.

By Registration Districts, the toll of life exacted by child-birth was the highest in Sind where 1 mother was reported to have died as the result of child-birth to every 70 births. Southern 1 to 130, Central 1 to 195, Gujarat 1 to 200, and Western 1 to 213 births.

In the Central Registration District Satara town only has the highest mortality from child-birth where one mother died after every 25 live-births, the figure for the previous year being 35. It is noteworthy that this year no death from child-birth was reported by Barsi town. Ratnagiri town shows greater mortality from child-birth as compared with the previous year where one woman died after 42 live-births instead of 172 in the previous year. Ahmednagar and Pandharpur show slight improvement. Poona City and Sholapur have gone worse, where one mother died after every 110 and 91 live-births respectively.

Among Collectorates the toll of life exacted by child-birth still continues to be the highest in Kanara where one mother died for every 42 births registered as compared with 45 in the previous year. The maternal mortality rates for other Collectorates of the Southern Registration District were Dharwar 1 to 181, Belgaum 1 to 153 and Bijapur 1 to 223 as against 158, 191 and 234 respectively in 1929. Elsewhere the following districts show high rates: Nasik 1 to 105, Ratnagiri 1 to 120, Thana 1 to 163, Sholapur 1 to 172, and Kolaba 1 to 187. The Sind rates are still higher, i.e. Sukkur 1 to 42, Larkana 1 to 52, Hyderabad 1 to 72, Nawabshah 1 to 83, Thar and Parkar 1 to 85 and Karachi 1 to 95 births.

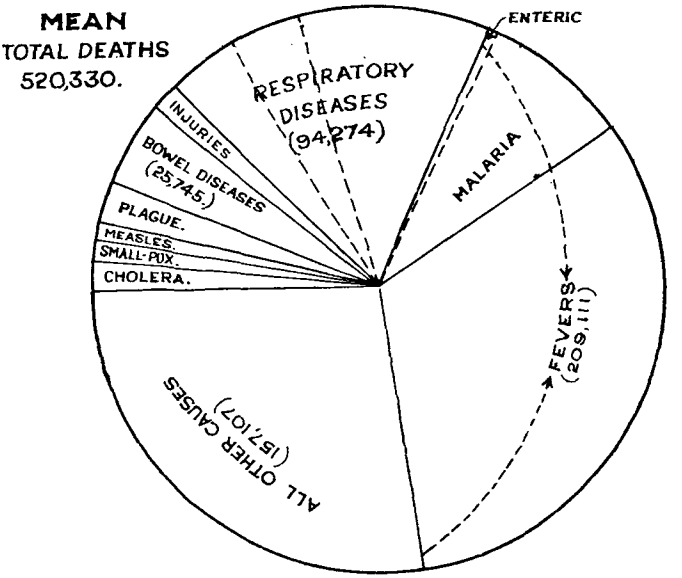
Sind towns show extreme rates as compared to the Presidency proper, for example, Larkana 1 maternal death in every 15 births, Sukkur 1 in every 26, Shikarpur 1 in every 26, Hyderabad 1 in every 86 and Karachi 1 in every 127 births. There is increase in Larkana, Sukkur and Shikarpur towns in maternal deaths. Karachi and Hyderabad towns show a much lower maternal mortality as compared with other towns. This is due to the activities of the Health Association Midwives at Karachi and the Municipal Lady Health Visitors, the Dias Improvement Scheme under the guidance of Miss Piggot and the Red Cross Society Health Association at Hyderabad.

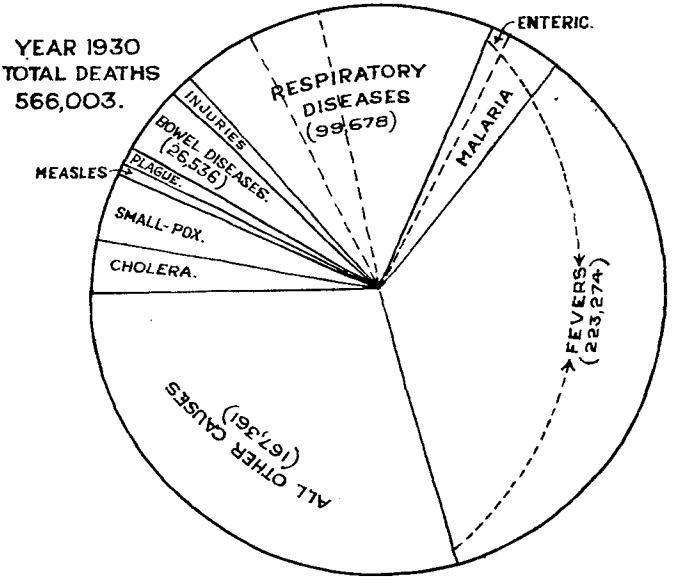
In Bombay City, 1 mother died for every 135 births against 123 in 1929. Amongst towns in the Presidency proper the highest rates were reported from Satara 1 to 25 births, Malegaon 1 to 37, Nasik 1 to 40, Ratnagiri 1 to 42, Dohad 1 to 46, Viramgaon 1 to 38, Pandharpur 1 to 50, Ahmedabad 1 to 55, Broach 1 to 62, Surat 1 to 76, Nagar 1 to 87, Sholapur 1 to 91, Nadiad 1 to 103 and Poona City 1 to 110 births.

67. The number of deaths from chief causes for each Collectorate and by months are shown in Annual Form Nos. VII to XII.

CHART V.

COMPARATIVE DIAGRAMS OF DEATHS BY CAUSES FOR MEAN 1925-1929 AND FOR 1930.





N.B. Epidemic diseases are shown in RED.

G.PZ.O. POONA-1931.

SECTION VII.

VACCINATION.

68. *Selected Districts.*—The system introduced in the year 1910 by which the control of vaccination in one district of each Registration District is exercised by the Local Board of that district was continued throughout the year.

69. *Changes in Area and Administration.*—The Murgod Mahal in the Belgaum District ceased to exist as a separate mahal and the villages in that mahal were transferred to the Parasgad Taluka. Consequently the designations of vaccinators of Murgod Mahal and Parasgad Taluka were changed into those of Parasgad N. D. and Parasgad S. D., respectively, with no alterations in their original jurisdictions.

70. *Changes in the strength of the establishment.*—During the year the Jamkhandi State employed for the first time a candidate vaccinator. The Kolhapur Darbar appointed an additional candidate vaccinator.

Primary Vaccination. (Appendix IV, Statement I.)

71. During the year 1930-31, 594,611 persons were primarily vaccinated against 662,018 in the previous year. There is a decrease of 67,407. The decrease was shared by all the Registration Districts, except the Southern Registration District and Sind.

The following table shows the number of children under one year available for vaccination (1) on the number of births registered less deaths under one year, and (2) on probable number of births at 31 per 1,000 of population less deaths and the percentages successfully vaccinated :—

District	Population	Number of births during the year	Deaths under one year	Births *minus* deaths
1	2	3	4	5
Western R. D.	4,027,344	180,490	35,818	144,672
Central R. D.	4,702,505	198,437	33,003	165,434
Southern R. D.	3,183,777	131,258	20,410	110,848
Gujarat R. D.	2,958,849	116,872	25,753	91,119
Sind R. D.	3,279,377	69,266	10,354	58,912
Total ..	18,151,852	696,323	125,338	570,985

District	Births at the rate of 31 per 1,000 of population	Number of children under one year successfully vaccinated	Percentage of available children (column 5) successfully vaccinated	Percentage of available children 31 per 1,000 of population (column 6) *minus* deaths successfully vaccinated
1	6	7	8	9
Western R. D.	124,848	91,086	61·57	103·88
Central R. D.	145,778	102,378	61·88	90·78
Southern R. D.	98,697	68,419	61·72	87·40
Gujarat R. D.	91,724	59,897	65·73	87·76
Sind R. D.	101,661	50,539	85·79	52·96
Total ..	562,708	372,319	65·21	85·12

For the Presidency as a whole the percentages were (1) 65·21 and (2) 85·12.

72. *Results.*—Out of 594,611 primary vaccinations performed 531,991 or 89·49 per cent. were successful and 1,052 or ·18 per cent. unsuccessful. In the remaining 10·35 per cent. of cases the results could not be ascertained.

181 infants were vaccinated a second time owing to failure of the first operation.

73. *Age and Sex.*—Of the primary vaccinations 422,155 or 70·99 per cent. were infants under one year and 148,266 or 24·93 per cent. of children between the ages of one and six years.

By sex 310,127 were males and 284,484 females, equal to a proportion of 109·01 to 100. The proportion of male to female children born during the year was 107·96 to 100.

Re-vaccination. (Appendix IV, Statement I.)

74. During the year 331,344 persons were re-vaccinated against 482,267 in the previous year showing a decrease of 150,923. The percentage of successful vaccinations was 29·34. Results could not be ascertained in 47·51 per cent. of cases.

The decrease is due to mass vaccination carried on on a large scale during the previous year.

75. *Vaccination of Pilgrims at Karachi.*—A temporary vaccination establishment consisting of one male vaccinator, one female vaccinator,

one clerk and one coolie was entertained in Karachi Town for the vaccination of pilgrims proceeding to Hedjaz. 4,558 pilgrims were re-vaccinated during the months of April and December 1930 to March 1931 of whom 3,542 were males and 1,016 females. By age periods 20 were under one year, 68 between one and ten years and 4,470 above ten years. The total expenditure incurred on vaccination of these pilgrims amounted to Rs. 905-9-1 and was defrayed by Government. In the preceding year, 7,018 pilgrims were re-vaccinated at a total expenditure of Rs. 816-9-0.

Vaccination in Indian States. (Appendix V, Statement I.)

76. In the Indian States, 127,176 persons were primarily vaccinated against 125,558 in 1929-30. The number of successful cases was 121,556 or 95·58 per cent. The percentage of success excluding unknown was 98·32.

Re-vaccinations numbered 28,297 against 32,911 in the previous year. The success rate excluding 3,988 unknown results was 64·73.

77. *Total Operations.*—During the year, the total number of primary vaccinations performed amounted to 721,787 and of re-vaccinations to 359,641 against 787,576 and 515,238 in 1929-30.

78. *Incidence of Small-pox.*—The following table shows the incidence of small-pox by three age periods in the different Registration Districts:—

Districts	Age				Percentage of deaths		
	Total deaths	Under one year	Under ten years	Above ten years	Under one year	Under ten years	Above ten years
Western R. D. ..	9,943	3,334	5,748	861	33·53	57·81	8·66
Central R. D. ..	1,248	312	561	375	25·00	44·95	30·05
Southern R. D. ..	949	250	375	324	26·34	39·52	34·14
Gujarat R. D. ..	1,244	412	606	226	33·12	48·71	18·17
Sind R. D. ..	664	78	162	424	11·75	24·40	63·85
Total ..	14,048	4,386	7,452	2,210	31·22	53·05	15·73

In all there were 14,048 deaths, the quinquennial mean being 6,111. The incidence was heaviest in East Khandesh and West Khandesh Districts.

79. *Vaccination Campaigns.*—Mass vaccination campaigns started early in January 1930 were continued.

With the object of reducing the number of unprotected school children to a minimum, the usual monsoon campaign was conducted by Inspectors of Sanitation and Vaccination in municipal towns and taluka headquarters.

Vaccination in Police Lines and outposts is being carried out regularly. Special visits are paid by the vaccinators every month for that purpose.

The vaccinators in charge of big fair centres were directed to push on primary and re-vaccinations well in advance of the fairs.

80. *Lymph.*—The lymph prepared at the Vaccine Institute, Belgaum, was the only one used throughout the Presidency.

The following table gives the results of all vaccinations performed excluding cases in which the result could not be ascertained :—

District	Number of operations		Successful		Percentage of success excluding unknown	
	Primary vaccination	Re-vaccination	Primary	Re-vaccination	Primary	Re-vaccination
Western R. D. ..	130,669	44,337	111,635	12,946	99·81	43·68
Bombay City ..	17,943	17,986	16,662	..	99·49	..
Central R. D. ..	152,391	122,508	138,613	39,924	99·91	78·03
Southern R. D. ..	102,976	87,499	99,353	30,744	99·90	49·35
Gujarat R. D. ..	80,861	7,864	71,835	2,292	99·36	45·63
Sind R. D. ..	100,330	45,989	93,318	11,310	99·73	43·83

81. *Cost of Vaccination.*—The cost of vaccination came to Rs. 6,57,641 against Rs. 6,43,147 in the previous year. The increase in the expenditure is due to appointment of a full-time Assistant Director of Public Health for the Western Registration District and increments in the pay of the staff.

The average cost of each successful case of vaccination was Re. 1-0-9 against Re. 0-15-5 in the previous year.

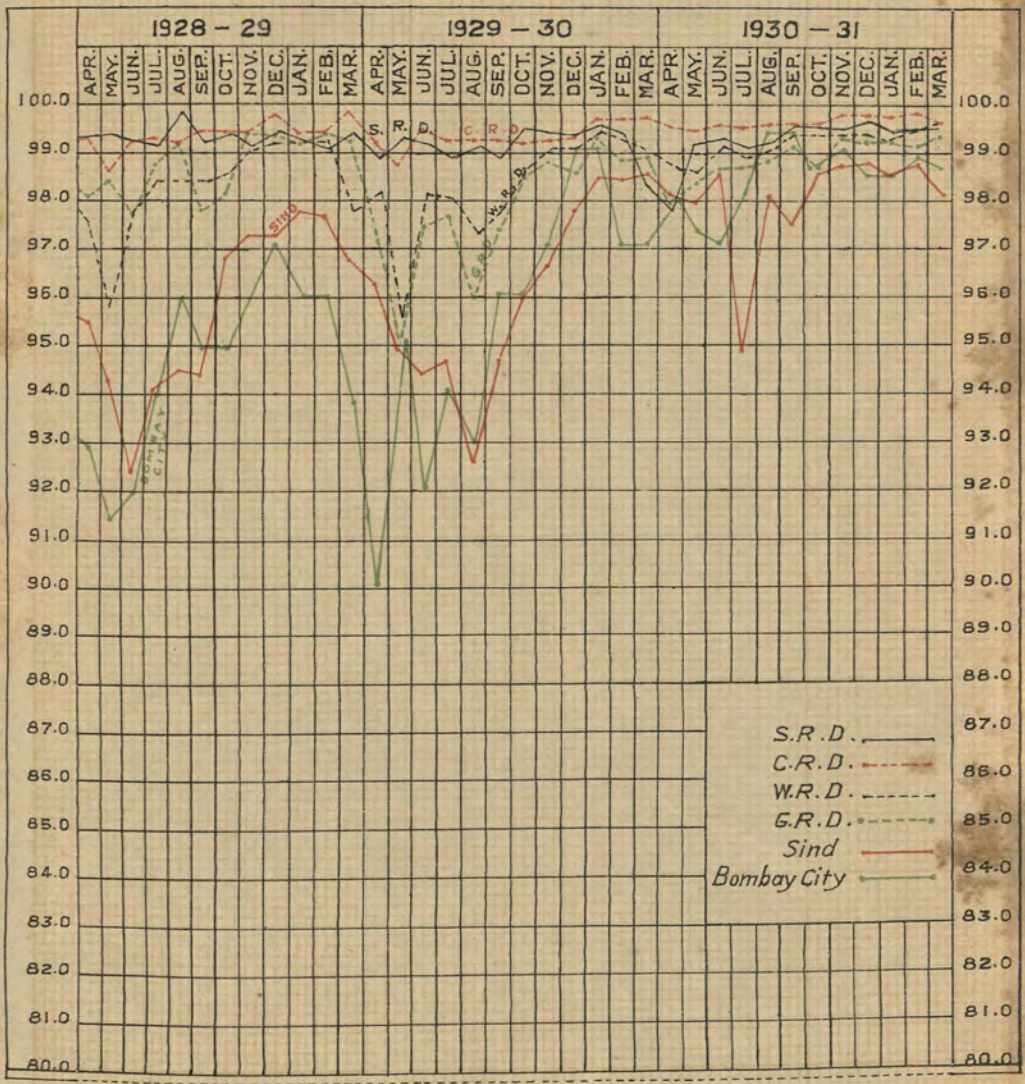
82. *Vaccine Institute, Belgaum.*—The mass vaccination campaigns, which were started during the previous year, continued to a greater or smaller extent in several parts of the Presidency during the year under report. Consequently the Institute had to meet with fairly heavy demands of lymph. 1,414,090 doses of lymph were issued as compared with 1,820,230 during the previous year. Besides the vaccinators of the Presidency, lymph was supplied to Baroda, Kotah and Jhalwar, Kathiawar, Palanpur and Mahi Kantha Agencies and Idar State. Civil and Military Medical Officers were also supplied with lymph.

83. Of the 1,414,090 doses issued, 1,098,491 were reported to have been used. 211,655 doses were issued to Indian States, 90,445 to Civil Medical Officers and 13,145 to Military Medical Officers, the success rate for all primary operations being 99·81 and for re-vaccinations 58·89. The case success rate (99·63) in the Indian States is almost equal to that (99·84) in the Presidency districts.

The results of primary vaccinations performed by the vaccinators were carefully scrutinized by the Director of the Institute. A chart showing the results of monthly primary vaccinations for the three years in the five Registration Districts and in Bombay City is attached.

CHART. VI.

INSERTION SUCCESS RATES OF PRIMARY VACCINATIONS WITH GLYCERINATED LYMPH IN THE SEVERAL REGISTRATION DISTRICTS OF THE PRESIDENCY & BOMBAY CITY FOR THE YEARS 1928-29, 29-30 & 30-31.



Two donkeys were vaccinated with the best seed lymph but the vesicles were very poorly developed and all of them were cheesy and well advanced. This was passed through the calves with the result that it showed signs of improvement for the first two passages and then deteriorated markedly. As the experiments were carried out during the month of March, it is proposed to repeat them during the favourable season next year to arrive at a conclusive evidence. Rabbits were used for passage and they served their purpose well to keep seed lymph of standard quality and potency as usual.

Calves.—There were 164 calves in stock at the commencement of the year. 726 cow calves and 4 donkeys were hired as compared with 1,719 calves during the previous year. At the end of the year, 93 calves and 2 donkeys remained in stock. Of the 793 calves vaccinated 5 proved unsuccessful and the lymph from 24 was rejected as unfit for use.

Cattle Disease.—Rinderpest was prevailing throughout the year in and about the places from where the supply of calves is made by the calf contractor. Strict veterinary examination, anti-rinderpest inoculations, rigid isolation, etc., helped to protect the animals almost throughout the year, except for a little disturbance caused by rinderpest. From 25th November to 10th December 1930 there were six cases of which one died.

Test of Potency of Lymph before issue.—The practice of testing every lymph on children, before issue from the Institute, was continued, 1,262 children being vaccinated in this way.

Repairs.—No new buildings were constructed. Current repairs were carried out as usual by the Public Works Department. A masonry compound wall round the old unserviceable kutcha well in the Institute garden was built at a cost of Rs. 75 to prevent accidents.

The work of constructing the new rabbit house has not yet been taken in hand for want of funds.

The following projects are still under consideration :—

(1) Additional quarters for the staff.
(2) Lecture hall.
(3) Hostel for vaccinators and others attending special training class held at the Institute.

Refrigerating Plant and Machinery.—The present underground cold-room being found unsatisfactory and incapable of maintaining the desired temperature, Government made a provision of Rs. 21,000 in the budget for the year 1931-32 for a frigidaire type of refrigerator and it is expected that one will be installed shortly.

Drainage.—The pipe line leading from the Director's bungalow had to be relaid as it was choked up by the penetration of the roots of trees close by. The sewage farm was utilized during the rains to raise Bajari and Jawari crops for the Institute calves. The Banana plantation on the sewage farm adjoining the septic tank did not thrive for want of sufficient water to dilute the effluent.

Expenditure.—The expenditure for the year amounted to Rs. 73,163-11-3, excluding annual repairs to buildings, interest on capital outlay and pension and leave contribution, against Rs. 83,194-14-10 during last year. There was thus a decrease in expenditure of Rs. 10,031-3-7 due to less quantity of lymph being manufactured. The receipts including sale of lymph and contributions came to Rs. 77,811-10-3 showing a profit of Rs. 4,647-15-0. If interest on capital outlay, etc., are included in the expenditure there was a deficit of Rs. 20,120-0-11. The net expenditure after deducting sale proceeds to non-contributing bodies was Rs. 22,746-1-0 against Rs. 37,367-3-7 in the previous year. The cost of lymph per dose manufactured amounted to 13·18 pies and cost per dose despatched 16·07 pies.

Institute Staff.—Dr. J. B. Mama, D.P.H., Director of the Institute, was awarded the title of "Khan Bahadur" in recognition of his services.

84. *Compulsory Vaccination.*—Excluding Bombay City, Aden and the seven Cantonments of Ahmedabad, Ahmednagar, Poona, Kirkee, Hyderabad, Belgaum and Deolali, the Vaccination Act is in force in only 17 towns of the Presidency. In other Provinces vaccination is compulsory in urban and rural areas as under :—

Bengal Presidency ..	Rural and urban areas including the existing 116 municipalities.
Madras	All (82) municipal towns, 17 districts and major portion of the remaining districts.
United Provinces ..	156 municipalities, Cantonments and Notified Area Committees and some town areas.
Burma	63 municipalities and Notified Area Committees and some districts.
Bihar and Orissa ..	58 municipal towns and certain rural areas.
Central Provinces ..	All municipal and Notified Area Committees except one.
Assam	23 towns.
Punjab	106 towns.
North West Frontier Province ..	9 towns.
Coorg	2 towns.

Three hundred and sixty-seven prosecutions were instituted under the Act during the year, mostly in Karachi City (310). Fines were inflicted in 24 cases and 21 cases were pending at the end of the year.

The Assistant Director of Public Health, Southern Registration District, reports that the progress of vaccination far from having advanced has actually been somewhat retarded in Belgaum Cantonment since the introduction of the Compulsory Vaccination Act and that no action has been taken by the Local Authority under sections 23 to 25 of the Act.

The bye-laws regarding registration of births are not properly enforced in some municipalities with the result that many births escape registration and the number of children vaccinated is in consequence smaller than it should be. Such children provide a potential source of danger to the community and it is for Local Bodies to realize this and to see to it that all births which occur in their areas are registered and the children vaccinated.

The following table shows the progress made in the protection of infants during the year under report and the number of deaths from small-pox during five years in those towns in which the Act has been in force together with date of extension of Vaccination Act to the towns :—

Name	Population	Number of births during the year	Children available for vaccination		Number of children under one year successfully vaccinated
			Births *minus* deaths of children under one year	At the rate of 31 per 1,000 of population	
1	2	3	4	5	6
1. Bombay City	1,175,914	25,035	17,303	36,453	12,863
2. Bandra	29,231	722	612	907	475
3. Kurla	26,059	679	507	807	517
4. Deolali Cantonment ..	18,789	30	23	582	68
5. Dhulia	30,605	1,406	221	948	845
6. Bhusawal	24,933	657	541	773	171
7. Malegaon	23,711	755	605	735	631
8. Ahmedabad	270,775	13,856	9,684	8,394	8,941
9. Ahmedabad Cantonment ..	3,232	..	..	100	..
10. Karachi	216,883	11,072	9,074	6,961	5,459
11. Hyderabad	73,951	2,922	2,250	2,512	1,138
12. Hyderabad Cantonment ..	3,760	32	26	116	31
13. Sukkur	42,759	1,003	794	1,340	604
14. Rohri	11,378	233	163	308	124
15. Larkana	17,723	614	469	572	174
16. Ahmednagar Cantonment ..	10,997	284	241	340	130
17. Ahmednagar City	33,138	1,582	1,338	1,027	1,595
18. Barsi Town	22,074	663	358	684	461
19. Poona City	133,227	4,869	3,359	4,130	3,204
20. Poona Suburban	13,971	150	95	433	167
21. Poona Cantonment ..	25,498	315	266	780	524
22. Kirkee Cantonment ..	7,991	219	169	248	257
23. Alandi	1,750	66	44	54	39
24. Pandharpur	25,210	975	569	882	690
25. Belgaum Cantonment ..	6,889	88	76	213	102
26. Aden	56,500	1,156	Not available.	1,751	345

Name	Number of deaths from small-pox					Date of extension of Vaccination Act to town
	1926-27	1927-28	1928-29	1929-30	1930-31	
1	7	8	9	10	11	12
1. Bombay City	651	723	867	1,135	1,677	September 1877.
2. Bandra	7	5	3	6	..	August 1900.
3. Kurla	12	2	3	2	1	Do.
4. Deolali Cantonment ..	..	2	..	..	..	August 1915.
5. Dhulia	3	5	..	73	25	15th June 1925.
6. Bhusawal	6	16	1	32	2	17th August 1926.
7. Malegaon	34	318	11	191	..	15th February 1930.
8. Ahmedabad	14	8	20	955	128	6th July 1913.
9. Ahmedabad Cantonment ..	..	..	..	..	..	Do.
10. Karachi	52	8	104	258	41	October 1879.
11. Hyderabad	50	12	6	57	236	February 1914.
12. Hyderabad Cantonment ..	..	..	..	..	..	Do.
13. Sukkur	1	..	2	24	3	June 1904.
14. Rohri	..	..	5	21	..	Do.
15. Larkana	4	..	..	8	1	April 1899.
16. Ahmednagar Cantonment ..	..	1	..	..	..	26th April 1925.
17. Ahmednagar City ..	2	113	7	2	4	25th October 1928.
18. Barsi Town	..	..	4	6	37	1st January 1930.
19. Poona City	242	236	62	1,157	29	10th April 1930.
20. Poona Suburban	5	2	1	14	1	10th May 1930.
21. Poona Cantonment ..	3	1	1	..	..	1st July 1930.
22. Kirkee Cantonment ..	..	1	..	4	..	10th July 1930.
23. Alandi	..	..	..	..	14	15th September 1930.
24. Pandharpur	1	213	3	11	6	1st December 1930.
25. Belgaum Cantonment ..	..	..	..	2	1	26th April 1925.
26. Aden	2	3	11	153	..	28th December 1916.

During the year the Compulsory Vaccination Act was brought into force in (1) Poona City, (2) Poona Suburban, (3) Poona Cantonment, (4) Kirkee Cantonment, (5) Alandi Town, and (6) Pandharpur Town.

An attempt is being made by addressing municipal authorities to make vaccination compulsory in their areas. The Assistant Director of Public Health, Southern Registration District, suggests that "the Bombay District Vaccination Act of 1892 should be so amended as to make it obligatory on all major municipalities to apply the Act compulsorily and to work it efficiently."

85. The practice of inoculation was not detected in any taluka during the year under report.

No ill-effects were reported to have occurred after vaccination during the year.

86. A diagram illustrating the proportion of population protected by vaccination during the seven years from 1st April 1924 to 31st March 1931 and the death-rate from small-pox for the year 1930-31 is given in Appendix VI.

87. *General Remarks.*—A training class for vaccinators was held from 1st July to 30th September 1930. There were in all 22 candidates all of whom passed the final examination. Dr. Ambalal Motiram Vyas, Chief Medical Officer, Danta, Bhavangad State, and Dr. M. A. Rashid sent by His Exalted Highness the Nizam's Government were trained in the lymph manufacture and all other things concerning vaccination.

During the year under report, two vaccinators and three candidate vaccinators were recruited from amongst the Marathas in the Western Registration District, one Hindu (backward) was appointed as candidate vaccinator in the Gujarat Registration District, and one Muhammadan candidate vaccinator was employed in each of the Central and Sind Registration Districts. In the Southern Registration District, one Muhammadan was appointed as vaccinator.

At the Vaccine Institute, Belgaum, a Hindu (backward) was appointed as Laboratory Assistant.

SECTION VIII—No remarks.

SECTION IX.

Sanitary Works—Civil.

88. *Municipalities.*—The number of Municipalities remained unchanged during the year. There are in all 155 with a total population of 2,678,542. Their total income excluding opening balance for the year was Rs. 4,45,24,222 of which Rs. 1,63,36,548 or 36·69 per cent. was raised by taxation, giving an incidence per head of population of Rs. 6-1-5. Taxation varied between Rs. 15-7-0 in Karachi City and Re. 0-14-0 in the small municipality of Betawad in West Khandesh District. The figures include a special conservancy cess in the case of many municipalities.

The incidence of municipal income and taxation per head of population in the larger municipalities is as follows :—

	Income.	Taxation.
	Rs.	Rs.
Bombay	25	22
Karachi	18	15
Ahmedabad	13	9
Poona	14	8
Surat	9	7
Sholapur	9	6

The expenditure on public health measures came to Rs. 5 per head of population in Karachi City and averaged about Rs. 3 for all remaining municipalities.

The following statement shows the birth and death rates among the municipal population in each district. Out of the 155 municipal towns 112 suffered from small-pox, 33 from plague, 60 from cholera and 8 from influenza. The cause mentioned is not the only one from which the number of towns shown suffered but also from one or the other of the diseases mentioned against them.

In 9 Revenue districts as compared with 13 in 1929 the municipal death-rate exceeded 30 per 1,000 of population. Comment on death-rates in principal towns has already been given in paragraph 21.

Statement showing birth and death-rates for Municipalities in the Bombay Presidency during the year 1930.

	Number of Municipalities.	Ratio of births per 1,000 of population.	Ratio of deaths per 1,000 of population.				
			Cholera.	Small-pox.	Plague.	Influenza.	All causes.
Ahmedabad ..	8	49·66	..	·44	..	·01	46·22
Kaira ..	8	42·84	·34	3·31	..	·02	39·11
Panch Mahals ..	2	35·85	1·05	2·72	..	..	28·90
Broach ..	3	46·18	..	5·88	..	..	35·65
Surat ..	3	41·12	..	5·09	·01	..	40·49
Thana ..	4	22·38	·08	2·14	·66	·02	23·42
East Khandesh ..	12	33·57	·63	2·69	..	..	28·19
West Khandesh ..	7	47·98	1·69	3·99	..	·01	37·57
Nasik ..	9	26·05	1·27	1·41	·02	..	27·52
Ahmednagar ..	2	38·45	·52	·28	..	·02	25·13
Poona ..	11	35·00	·48	4·77	·45	..	39·71
Satara ..	12	25·38	1·67	·51	·02	..	26·04
Sholapur ..	5	40·62	2·25	·40	·22	..	45·34
Belgaum ..	6	31·27	·30	·54	1·22	·01	26·31
Dharwar ..	9	35·67	·52	·27	·93	..	27·43
Bijapur ..	4	39·21	·39	1·04	1·50	·01	35·88
Kanara ..	8	29·24	..	·08	1·56	..	20·12
Kolaba ..	7	22·95	·25	·30	..	..	18·43
Ratnagiri ..	4	25·37	·03	·24	2·05	..	21·59
Karachi ..	5	50·83	..	·37	..	·03	28·18
Hyderabad ..	6	34·52	..	1·90	..	..	27·13
Larkana ..	5	28·72	..	·05	..	..	27·36
Thar and Parkar ..	2	17·95	..	·20	..	..	20·37
Nawabshah ..	2	28·38	..	..	..	..	16·25
Sukkur ..	5	26·56	..	·03	..	..	30·98
Upper Sind Frontier.	1	10·59	..	..	..	..	19·21
Bombay Suburban .	4	24·75	..	·17	·08	·02	20·72

89. The Assistant Directors of Public Health in the course of their regular tours and special visits make a point of conferring with the Councillors of Local Bodies on matters concerning public health.

During the year complete sanitary surveys of 19 towns were made and inspection or reports in the case of 106 more. Advice was given in all these and in numerous other cases in matters of water-supply, conservancy, prevention of spread of disease and in measures of a more general nature. Action was taken by many of the municipalities on the suggestions of Assistant Directors of Public Health of which the following is a brief summary :—

Dhulia, Malegaon, Belgaum, Dharwar and Guledgud constructed new latrines.

Nasik, Amalner, Chopda, Shahada, Sinnar, Malegaon and Belgaum constructed new drains.

Chopda, Faizpur, Igatpuri, Saundatti, Bail-Hongal, Sirsi, Byadgi, Guledgud and Gadag-Bategeri improved water-supply.

Dharangaon constructed a mutton market.

Bhagur, Gadag-Betegeri, Bijapur and Bagalkot removed prickly-pear.

Yawal, Chalisgaon, Dharwar, Gadag-Betegeri, Ranebennur and Nargund constructed gutters.

Bagalkot constructed new "U" shaped gutters.

Hubli purchased 3 Myres Tub Spray pumps for disinfection of plague infected localities.

Gadag-Betegeri purchased two motor lorries, one for removal of night-soil and the other for refuse.

Sirsi purchased motor and Pumping Engine for watering streets.

In addition to the above, repairs to existing drains, markets, wells, free distribution of quinine and medicines for the prevention and cure of cholera and other works of public health utility were undertaken by many municipalities.

The Assistant Director of Public Health, Gujarat Registration District, states that the Nasik system of trenching night-soil is working satisfactorily in 12 towns. The system has proved a great success in Nadiad and Surat. Rs. 544 and Rs. 1,200 were realized from the sale of the poudrette by the Nadiad and Surat Municipalities respectively. Godhra Municipality realized Rs. 115 against Rs. 219 in the previous year from the poudrette which is much in demand among the cultivators. The system has been introduced in some of the towns in Khandesh and Nasik. When this system is properly worked with due attention to detail it provides excellent manure for which there is always ready market.

The Assistant Director of Public Health, Sind Registration District, at every visit to Municipal towns impressed on the Local Authorities the advantages of Nasik system.

90. *Municipal Health Staff.*—During the year under report fully qualified Medical Officers of Health were employed in Karachi, Hyderabad, Ahmedabad, Surat, Poona and Sholapur. In Karachi and Ahmedabad, qualified Assistant Health Officers were also employed. Health Officers holding the medical degree of the Bombay University in addition to the Sanitary Inspectors' certificate and the B.Hy. (Bom.) were employed at Broach, Bandra, Ahmednagar and Bijapur. Shikarpur and Sukkur employed Medical Officers of Health possessing qualifications of a first class town but drew the scale of pay prescribed for a second class town. Nasik, Dakor and Dhulia had a Health Officer possessing the qualifications of a Medical Officer for a second class town while Nadiad and Saundatti employed Licentiates of the College of Physicians and Surgeons holding Sanitary Inspectors' certificates.

Rao Saheb Dr. Gune, L.M. & S., continued to hold charge of Pandharpur.

Ninety-two qualified Sanitary Inspectors were employed in 46 towns as compared with 87 and 41 respectively in 1929; Ahmedabad 15; Poona 8; Sholapur 7; Surat 7; Karachi 3; Sukkur 3; Nasik, Bijapur, Belgaum, Hubli, Gadag, Pandharpur, Ahmednagar, Hyderabad and Shikarpur 2 each; and the following one each—Nandurbar, Dhulia, Jalgaon, Bhusaval, Amalner, Chopada, Malegaon, Trimbak, Igatpuri,

Manmad, Thana, Kalyan, Kurla, Bandra, Ghatkopar, Matheran, Bagalkot, Haliyal, Saundatti, Barsi, Satara, Mahableshwar, Panchagani, Rohri, Tando Adam, Larkana, Rander, Bulsar, Broach, Viramgaon and Godhra.

91. *Training of Sanitary Officers.*—Ninety-two students were on the class roll in Bombay of whom 86 together with 46 students from previous classes making up a total of 132 appeared for the examination. Of these, 68 passed the examination and obtained the certificate of the Royal Sanitary Institute, London. There were six Government nominees for free-studentships—one medical graduate, two veterinary graduates, one Licentiate of the College of Physicians and Surgeons and two clerks one each from the offices of the Assistant Directors of Public Health, Central and Southern Registration Districts, who attended the course. Five of these appeared for the examination and all of them passed. The one who did not appear for the examination was a veterinary graduate.

The examination of the Junior Health Officers was not held as no candidate had enrolled himself for the course.

92. *Inspection of Local Sanitation by Dispensary Medical Officers.*—Forty-one Dispensary Medical Officers in Western Registration District, 2 in Central Registration District and 8 in Gujarat Registration District gave advice to local bodies and assistance in public health matters. The Medical Officers at Modassa, Dholka and Sanand receive small allowances of Rs. 5 to Rs. 10 per mensem from the Municipality for undertaking sanitary inspection of the towns.

93. *Sanitary Boards.*—The report on its working is published independently.

94. *Extension of Village Sites.*—Progress in this direction may be summarised as under :—

East Khandesh.—Thirty gunthas of land were acquired for the village Rahimpuri of Chalisgaon Taluka ; 4 acres and 18 gunthas of land were acquired for the village Kerhale B. K. of Raver Taluka.

Sholapur.—Seventeen acres and six gunthas of land were acquired for the village Avandhi of Madha Taluka. The village planning was attended to.

Poona.—Thirteen acres and fourteen gunthas of land were acquired in the village Shivtakrar, Purandhar Taluka by the Lake Whiting Division in the year 1919 for Lime Depôt and Lime Kiln. It has been relinquished to the Revenue Department as it was not required by that Division and has been planned out into plots for a village site.

Belgaum.—Five acres and 3 gunthas, 3 acres and 36 gunthas of land were acquired for the villages of Malhar and Belgali of Parasgad and Chikodi talukas respectively.

Dharwar.—Forty-four acres and 28 gunthas of land were acquired for villages Tadas, Sudami, Kudapli and Ghalpuji of Kod Taluka 6 acres of land were acquired for the village Badamgatti of Hangal Taluka ; one acre of land was acquired for Shiggaon and 4 acres and one guntha of land was acquired for the village Noolvi of Hubli Taluka.

Bijapur.—Twenty-eight acres and 8 gunthas of land were acquired for the village Baglur, Sindgi Taluka.

Kolaba.—Two acres and 20 gunthas and 8 gunthas of land were acquired for the villages Padum and Deokanhe of Roha Taluka respectively.

95. *District and Taluka Local Boards.*—The aggregate income of the 27 District Local Boards and 222 Taluka Local Boards amounted to Rs. 1,62,83,957. Income and taxation per head of population were Re. 1-1-0 and Re. 0-5-3 respectively against Re. 1-4-6 and Re. 0-5-3 in 1929. A total sum of Rs. 29,86,234 was spent by these Boards on communications while Rs. 9,20,517 were spent under the head of Public Health Works.

Under Government Resolution, General Department, No. P. 129 of the 5th June 1930, the following grants were placed at the disposal of the Commissioners of Divisions for distribution among the District Local Boards of the Presidency and Sind. These grants are intended to be utilized primarily for expenditure for roads and bridges :—

	Rs.
Northern Division	2,31,500
Central Division	5,40,500*
Southern Division	3,37,500
Sind Division	3,40,500

* Includes the allotment for Bombay Suburban Division.

A special allotment of Rs. 50,000 is reserved for grant to the District Local Board, Ahmedabad, on account of the reconstruction of the bridge on the Ahmedabad-Dholka road.

Under Government Resolution, General Department, No. P. 20 of the 10th June 1930, the following grants were placed at the disposal of Commissioners of Divisions for distribution among the District Local Boards of the Presidency and Sind for improvement of village water-supplies :—

	Rs.
Northern Division	85,000
Central Division	60,000†
Southern Division	61,000
Sind Division	36,000
Reserved with Government ..	5,000

† Includes the allotment of Rs. 3,000 for Bombay Suburban Division.

These grants were supplemented by allotments from Local Funds and popular contributions, and were expended on constructing wells, tanks, troughs and cisterns, in repairing old wells and closing step-wells and in boring operations.

Five hundred and fifty-three draw-wells were constructed during the year. One hundred and sixteen step-wells were converted into draw-wells.

96. *Notified Areas.*—There are 27 Notified Area Committees working in this Presidency during the year under report as compared with 27 in

the previous year (Committees which had not commenced work are excluded).

The population served by these Committees was 104,944 and the total income from Revenue excluding opening balance came to Rs. 4,23,851 giving an incidence of income per head of Re. 0-11-1. The following tables show the details of income and expenditure and the combined birth and death rates for Notified Areas in each district :—

Statement showing income and expenditure of the Notified Area Committees in the Bombay Presidency during the year 1930-31.

District.	Serial No.	Names of towns and villages.	Population.	Income including opening balance.	Expenditure.	Closing balance.
				Rs.	Rs.	Rs.
Bombay Suburban ..	1	Andheri	6,211	97,508	65,061	32,447
	2	Vile Parle ..	7,479	1,10,604	75,183	35,421
	3	Malad	8,460	27,293	26,191	1,102
	4	Kandivli	3,444	10,458	9,166	1,292
	5	Borivli	5,957	24,445	17,351	7,094
	6	Santa Cruz ..	9,000	99,499	99,341	158
	7	Chembur	3,191	6,180	5,126	1,054
	8	Mulund	3,000	4,850	3,770	1,080
	9	Ambernath ..	3,000	11,638	4,882	6,756
Ratnagiri ..	1	Dapoli	2,689	14,295	8,092	6,203
	2	Khed	3,842	24,318	20,636	3,682
	3	Rajapur	6,361	22,324	16,586	5,738
Bijapur ..	1	Hungund	5,563	5,776	2,830	2,946
Dharwar ..	1	Annigeri	8,039	2,147	1,738	409
Sukkur ..	1	Koti Sultan ..	1,696	1,965	903	1,062
	2	Mirpur Mathelo ..	1,642	1,851	1,327	524
	3	Ubauro	1,716	3,177	2,378	799
	4	Khairpur Dahorki ..	1,657	3,562	2,510	1,052
Satara ..	1	Lonand	1,872	2,829	1,477	1,352
Larkana ..	1	Meher	2,746	23,370	10,091	13,279
	2	Khairpur Nathanshah .	1,484	3,934	2,565	1,369
	3	Dadu	2,996	8,772	5,055	3,717
Poona ..	1	Talegaon Railway Station.	1,080	2,366	1,115	1,251
Hyderabad ..	1	Tando Jam ..	2,634	6,158	2,675	3,483
Nawabshah ..	1	Nawabshah ..	2,872	34,707	30,034	4,673
	2	Naushahro ..	3,400	4,088	4,036	52
	3	Kandiaro	3,013	6,945	4,165	2,780
Total ..	27		104,944	5,65,059	4,24,284	1,40,775

Statement showing by Districts combined birth and death rates for Notified Area Committees in the Bombay Presidency during the year 1930.

Districts.	Number of Notified Area Committees.	Ratio of births per 1,000 of population.	Ratio of deaths per 1,000 of population.				
			Cholera.	Small-pox.	Plague.	Influenza.	All other causes.
Bombay Suburban ..	12	18·19	..	·30	..	..	15·14
Ratnagiri ..	3	27·89	·22	..	..	..	22·40
Bijapur ..	1	41·17	·54	..	..	..	26·61
Sukkur ..	4	27·86	..	..	..	..	34·42
Nawabshah ..	3	14·28	..	..	..	..	24·75
Larkana ..	3	20·48	..	..	..	..	18·54
Hyderabad ..	1	30·76	..	..	..	..	23·45
Poona ..	1		Information not available.				
Dharwar ..	1	31·96	·51	..	1·78	..	22·67
Thana ..	1		Information not available.				
Satara ..	1	44·85	..	2·99	..	..	42·46

No works of importance were carried out during the year except that the Santa Cruz Notified Area Committee made agreement with the Andheri Notified Area Committee to dump the night-soil into their trenches at Oshivra and share the cost. It also constructed a market and a market inspector with necessary sweepers has been appointed. Vile Parle filled up the play-ground plots in Town Planning Scheme No. II (Plot No. 140) where the water used to accumulate during the monsoon. It provided 19 new dust-bins for different areas and employed 8 Halalkhores and 6 street sweepers.

97. *Village Sanitary Boards.*—There are two Sanitary Boards working in the Presidency, viz. one at Siddapur in Kanara District and the other at Mandal in Ahmedabad District. Their total income including opening balance was Rs. 3,607 while expenditure amounted to Rs. 2,509 leaving a closing balance of Rs. 1,098.

98. *Sanitary Committees and Village Panchayats.*—During the year there were working in all 575 Sanitary Committees and Village Panchayats.

Details of income and expenditure and of birth and death rates for the population under their administration are given in the following tables.

Statement showing by Districts income and expenditure of Village Panchayats and Sanitary Committees in the Bombay Presidency during the year 1930.

District.	Number of Village Panchayats and Sanitary Committees.	Total income including opening balance.	Popular contribution.	Total expenditure.	Closing balance.
		Rs.	Rs.	Rs.	Rs.
Ahmedabad	1	10,574	1,738	8,438	2,136
Kaira	27	37,727	9,302	18,546	19,183
Panch Mahals	6	11,110	5,499	7,083	4,027
Broach	17	35,753	12,320	23,060	12,693
Surat	14	18,543	5,398	10,786	7,757
Thana	33	42,757	19,243	33,096	9,661
Total, Northern Division ..	98	1,56,464	53,500	1,01,007	55,457
East Khandesh	34	1,86,212	1,05,283	1,16,902	69,310
West Khandesh	13	39,676	7,166	19,883	19,793
Nasik	26	40,180	6,711	21,856	18,324
Ahmednagar	17	40,311	7,681	29,451	10,860
Poona	18	52,315	11,496	29,529	22,786
Satara	18	11,765	3,848	6,597	5,168
Sholapur	6	11,468	..	10,456	1,012
Total, Central Division ..	132	3,81,927	1,42,185	2,34,674	1,47,253
Belgaum	40	54,513	13,834	29,592	24,921
Dharwar	44	41,582	10,096	23,962	17,620
Bijapur	24	35,664	7,410	21,643	14,021
Kolaba	19	17,250	5,702	11,151	6,099
Ratnagiri	2	2,455	530	1,758	697
Total, Southern Division ..	129	1,51,464	1,73,072	88,106	63,358
Karachi	40	36,229	6,877	18,968	17,261
Hyderabad	43	50,845	8,373	22,854	27,991
Larkana	48	44,052	10,842	26,250	17,802
Thar and Parkar ..	28	36,014	8,326	18,156	17,858
Nawabshah	25	36,504	7,100	18,192	18,312
Sukkur	18	25,785	5,567	12,371	13,414
Upper Sind Frontier ..	13	27,619	5,685	17,098	10,521
Total, Sind ..	215	2,57,048	52,770	1,33,889	1,23,159
Bombay Suburban ..	1	8,020	4,035	3,838	4,182
Grand Total ..	575	9,54,923	4,25,562	5,61,514	3,93,409

Statement showing by Districts combined birth and death rates for Village Panchayats and Sanitary Committees in the Bombay Presidency during the year 1930.

District.	Number of Village Panchayats and Sanitary Committees.	Ratio of births per 1,000 of population.	Ratio of deaths per 1,000 of population.				
			Cholera.	Small-pox.	Plague.	Influenza.	All other causes.
Ahmedabad ..	3	29·52	..	..	..	..	30·54
Kaira ..	28	30·31	..	·64	..	..	26·50
Panch Mahals ..	7	38·93	2·17	1·98	..	..	33·27
Broach ..	20	34·22	..	1·64	..	..	30·24
Surat ..	14	36·06	·16	1·56	·92	..	27·93
Thana ..	40	29·06	·03	1·07	·27	..	19·80
East Khandesh ..	37	50·48	2·21	5·46	..	..	43·64
West Khandesh ..	13	49·62	1·20	3·81	..	..	40·59
Nasik ..	24	49·19	2·67	·87	..	..	35·13
Ahmednagar ..	28	38·72	1·25	·42	·14	..	26·60
Poona ..	19	30·73	1·96	·67	..	..	24·75
Satara ..	26	38·37	4·59	·58	·88	..	45·97
Sholapur ..	12	31·86	1·84	·35	·75	..	24·06
Belgaum ..	42	39·48	·12	·31	1·04	..	25·92
Dharwar ..	44	46·90	·04	·18	3·79	..	30·91
Bijapur ..	31	41·44	1·45	·38	·07	..	31·00
Kolaba ..	21	34·94	..	1·52	..	..	27·36
Ratnagiri ..	3	28·04	..	·82	1·23	..	23·01
Karachi ..	41	20·56	..	·61	..	..	23·83
Hyderabad ..	43	23·02	..	·17	..	..	21·54
Larkana ..	49	20·30	..	·12	..	..	23·45
Thar and Parkar ..	26	20·33	..	·13	..	..	21·70
Nawabshah ..	27	25·36	..	·03	..	..	22·41
Sukkur ..	17	26·16	..	..	..	..	38·82
Upper Sind Frontier ..	12	20·51	..	..	..	..	35·68
Bombay Suburban ..	1		Not available.				

The Assistant Directors of Public Health during their tours inspected the sanitary arrangements of the villages where Committees or Panchayats existed and their recommendations for improvements were forwarded to the Revenue Officers concerned.

Examples of useful work done by Sanitary Committees and Village Panchayats are given below :—

The Village Panchayats at Songir and Palaskhede purchased cholera medicines and distributed them free in order to check the spread of the epidemic of cholera.

Holnantha, Asode, Pimprale, Thorgavan, Mehunbare, Varangaon, Songir, Lasalgaon and Tale sterilized drinking water wells regularly.

Bhadgaon and Kurhe purchased disinfectants.

Pimpalgaon and Lasalgaon removed prickly-pear.

Songir purchased a spray for spraying breeding grounds of mosquitoes with kerosene.

Adavad disinfected gutters.

Dhanora, Nawapur and Wagholi repaired gutters.

Pachora built wells, Kasara and Bodawad repaired latrines.

Pantonde spent Rs. 48-4-0 on lighting. Lohare engaged sweepers. Songir, Nawapur, Betawad and Maroli paid attention to conservancy.

Radhu (Kaira District) closed pit-privies. Sanitary Committees at Jamesabad, Dengan, Samaro, Shadipalli and Nagar Parkar (Thar and Parkar District) had exceeded their annual income but they had good balances. Sanitary Committees at Jhudo, Khipro, Phulahdyn and Sanjhar had exceeded their closing balances by Rs. 1,000.

A Village Panchayat at Bableshwar (Bijapur District) and Sanitary Committees at Sardar Labhsing and Sardar Muhammud (Thar and Parkar District) were newly constituted during the year.

The Village Panchayats at Alipur (Broach District), Dabhan (Kaira District) and Shehra (Panch Mahals District) were abolished.

SECTION X.

GENERAL.

Public Health Laboratories.

99. The Poona and Karachi Public Health Laboratories continued their valuable work throughout the year. Some bacteriological and pathological work was also done at the Municipal Laboratory, Ahmedabad.

Poona Laboratory.—Dr. F. Barretto, D.P.H., was in charge of the laboratory throughout the year. A large amount of analytical work, mostly in connection with water-supplies was carried out during the year. Daily water samples were analysed for Poona Cantonment, Poona City, Pashan and Holkar Bridge (July to November).

Samples were received at regular intervals from Municipalities, Railways, Government Institutions, Indian States and private bodies.

The samples from Poona Water-works included 264 of raw canal water, 277 filtered water, settled water 144, alumed 130 and 377 of chlorinated water.

Six hundred and twenty-eight samples from taps supplied from the service reservoirs were also analysed.

Raw canal water 264, and chlorinated tap water 280 samples were analysed for Poona City Supply.

Samples of water examined from the Pashan Water-works were—lake water 101, raw water 101, filtered water 112, chlorinated 277 and tap water 33; while from the Holkar's Bridge, river water 112, alumed 110, filtered 112, chlorinated 111 and tap water 21 were analysed.

Two hundred and thirty samples were received from various municipalities and other bodies and 182 were examined for experimental purposes. The total for the year was 4,367 samples examined bacteriologically and 7,236 chemically.

Chemical work for Poona Cantonment Water-works included examination of 261 samples of raw water; 133 filtered water and 277 chlorinated water; for Kirkee Water-works 48 raw water. Ninety-one samples from out stations were also examined.

Besides these, 2,788 water samples were estimated for free chlorine and 281 samples for determination of dose of alum. Tests for turbidity of water in 263 samples sent by the Executive Engineer, Special Irrigation Division, Poona, were carried out to estimate the dose of alum required. 16 effluent samples received from the G. I. P. Railway stations, viz. Lonavla, Karjat, Kalyan, Chola and Matunga and 2 from the Sholapur Municipality were analysed. 119 samples from the Bahiroba Pumping station, 24 samples from the Ammunition Factory, Kirkee; 30 samples from the Deccan Gymkhana Colony; 16 samples from the Winter Disposal Works and 25 samples of food and drugs were analysed. 121 samples were also examined for determining P^H value (Hydrogen Ion).

The dose for chlorination was determined for 258 samples from the Lloyd Swimming Bath sent to the Laboratory.

One thousand three hundred and seventeen tintometer tests were done for water-works in the whole of Poona.

Chlorination of Poona Water-supplies.

Pure water after final treatment from the Poona Cantonment water-supply maintained its high standard of purity. 97·47 per cent. and 94·00 per cent. of the samples tested showed absence of B. Coli in 100 c.c. and 500 c.c. respectively. The average number of total colonies grown on Nutrient Agar and Bile Agar for the chlorinated water during the year was 6·34 and 0·083 respectively, showing a percentage reduction of 99·6 per cent. and nearly 100 per cent. respectively.

The average dose of chlorine used during the year for the Cantonment Water-supply was 0·295 parts per million parts of water.

The distributary system except the low service shows deterioration in the purity of the water as estimated by the results of bacteriological examination of service reservoirs and tap samples. Examination of samples taken from the Inlet Reservoir and Outlet of these reservoirs showed that the deterioration usually takes place in the reservoir owing to the roofs being faulty and liable to admit dust and other impurities. Investigations in this connection had been made in March 1928 as a result of which it was advised to replace the existing roofs by concrete ones. This has not yet been carried out and the results continue to be unsatisfactory.

During the year under report there was a new filter added to the existing series at the Poona Cantonment Water-works. This was ready for use by the end of November 1930. Samples were bacteriologically tested from the end of November 1930 to the end of March 1931 to satisfy that the terms as regards the degree of purity of the water after filtration, as specified in the contract, were fulfilled. The new filter will yield an additional million gallons of filtered water per day.

As regards Poona City Water-supply, no filtration is carried out as is the case of the other water-supplies in Poona but it is sterilized by means of chlorination alone. The results on the whole have been better as compared with the last year—B. Coli were absent in 73·65 per cent. of the 100 c.c. samples against 76·46 per cent. The average number of total colonies on Nutrient Agar and Bile Salt Agar for the chlorinated water was 64·85 and 7·52 respectively showing a percentage reduction of 96·96 per cent. and 98·87 per cent. on the raw canal water.

The average dose of chlorine for the year was 0·427 parts per million parts of water.

When the canal is closed the chlorinated water is stored in the settling tanks. The tap water on analysis did not give satisfactory results during these periods. In consultation with the Medical Officer of Health, Poona City Municipality, it was decided to re-chlorinate the water at the outlet with an additional dose and this gave satisfactory results.

At the Pashan Water-supply the filtration is carried out with Slow Sand Filters as in the past years. The average results of the finally treated water yielded 90·61 per cent. in 0 in 100 c.c. and a percentage

purification of 96·44 per cent. on Nutrient Agar and 99·87 per cent. on Bile Salt Agar.

The average dose of chlorine used was 0·545 parts per million parts of water.

The Holkar's Bridge Water-works, Kirkee, which consists of Paterson Rapid Filters, worked from July to November. 91·89 per cent. of the chlorinated water samples yielded 0 *in* 100 c.c. and the percentage reduction of the colonies on Nutrient Agar was 99·85 per cent. and on Bile Salt Agar nearly 100 per cent.

The average dose of chlorine used was 0·294 parts per million.

The Officer in charge of the Public Health Laboratory, Poona, paid special visits to Matheran, Visapur, Mahableshwar, Alandi, Sholapur, Jalgaon and Dhulia to advise the local authorities on technical matters in connection with water-supplies there.

In the course of his duties he visited Pashan, Yeravda, Kirkee, Hadapsar, Poona City Water-works, some of the public institutions and private houses.

The samples sent to the laboratory by the Medical Officer of Health, Sholapur Municipality, yielded 0 in 100 c.c. on bacteriological examination. At the time of the visit, however, the samples collected and examined on the spot gave bad results proving that neither the samples were properly collected nor the dose properly adjusted. Necessary instructions were given to the Medical Officer of Health.

A further difficulty is experienced at this water-works as regards alum treatment which has to be carried out for 7 or 8 months of the year owing to the insufficient capacity of the settling tanks which hold only about $\frac{1}{3}$rd of a day's supply and no time for settlement is available.

From Sholapur he proceeded to Barsi and found that the men in charge of the chlorination plant, though they were trained at the laboratory did not appear to understand how to carry out the method of chlorination properly. Chlorinated water from the reservoir did not show even a trace of blue colour. Samples of chlorinated water were tested bacteriologically from both compartments of the reservoir and the tap nearest the town. The results were not satisfactory which were due to the fact that the reservoir took 14 hours to fill whereas the chlor-solution was run in 2 or 3 hours. On adjusting the chlorine solution tap so as to take the same time to employ (i.e. 14 hours) as the filling of the reservoir—thus ensuring a thorough mixture—a blue colour was obtained in the chlorinated water.

In September on a complaint by the Medical Officer of Health, Poona City Municipality, the tap water at the Khan Bahadur Pestonji Sorabji Dispensary, Poona City, was tested on the spot and blue colour obtained.

In November 1930 he visited Alandi with Mr. Collett, Executive Engineer, Poona Water Works Division, in connection with the chlorination of water-supply during the Kartiki Fair and tested the chlorinated water on the spot. Samples of water and chlorine solution were brought to the laboratory for examination. The dose of chlorine was estimated and examination of water samples done at the laboratory during the

time of the fair. This emphasises the value of the visits of the Officer in charge of the Public Health Laboratory, Poona, to water-works to check the standard of purity on the spot and avoid a false sense of security engendered by samples giving good results at the laboratory on account of the defective technique when collecting them.

Research Work.

I. *Minimum dose needed to sterilize Katraj Water.*—As the dose determined by the usual method (Sims Woodhead) was 64 lbs. per million gallons—3·2 c.c. of 1 in 1,000 bleaching powder solution being absorbed so as to give a faint blue with potassium iodide and starch—which appeared to be a very high dose, tests were carried out to see if a lower dose would be effective. Acetic acid was added to those bowls which gave no blue colour with potassium iodide and starch and a blue colour was obtained with 1·6 c.c. of the solution used which is equivalent to 32 lbs. per million gallons. Tests were carried out and samples of Katraj water treated with doses at 32 lbs. and 64 lbs. respectively, were after half an hour's contact bacteriologically examined. The lower dose was found unsatisfactory and even the higher dose did not seem sufficient.

II. *Catadyn.*—This is a sterilizer consisting of beads coated with a deposit of silver and was brought by a representative of the Firm of Messrs. Duncan Stratton and Company, Bombay.

Various bacteriological tests were carried out to estimate its efficiency as compared with chlorine.

The results showed that it was not as speedy as chlorine in its sterilizing effect, though the effect was more lasting.

The Makers claimed also that Catadyn treated water if mixed with an equal amount of the same crude water sterilized the whole, but laboratory tests did not confirm this—the experiment was carried out with canal water.

III. *p^H reaction of water.*—Several experiments were carried out on the p^H value of alumed water to determine the relations, if any, between the p^H value and the formation of floc. Conclusive results have not so far been obtained.

Similar experiments were also carried out on the p value of alumed water in connection with complaints from the Sholapur Water-works that the alumed water was corroding the metal of the pump.

These experiments revealed the fact that the water which gave an acid reaction on the addition of alum gradually changed to neutrality after 24 hours or more according to the dose employed.

Increase of work.—The question of increase of staff and extension to the present building is becoming a matter of urgent need day by day as will be seen from the fact that the number of samples which was 3,823 in 1918-19 has risen to 11,604 in the year under report, i.e. to say, it has nearly trebled and this has been carried on by almost the same staff and in the same building which existed in 1918-19. Under existing conditions with a limited staff and accommodation any further expansion of work is hardly possible.

Facilities were given to Mr. D. G. Kulkarni, B.Ag., Hadapsar, Special Irrigation Department, to study the determination of h^H values of soil samples.

(A chart showing deaths from intestinal diseases dysentery, diarrhœa, typhoid, etc., in Poona City and Cantonment before and after chlorination of the water-supply is attached.)

Karachi Laboratory.—Dr. Bhujanga Rao was in charge of the Chemico-Bacteriological Laboratory, Karachi, throughout the year.

Karachi Water-supply.—The Chemical and bacteriological examination of raw and chlorinated water was carried out daily as a matter of routine throughout the year. The estimation of the dose is being carried out and reported daily by phone to the Municipal Medical Officer of Health.

The liquid chlorination plant installed by the Municipality is working satisfactorily. 267 samples of raw water and 918 chlorinated were examined bacteriologically and 252 of raw and 255 chlorinated water were chemically examined. Besides, 273 samples were analysed for examination of strength (in chlorine) in bleaching powder.

Sukkur Water-supply.—Samples of raw, settled and chlorinated water were sent regularly every week to the laboratory for chemical and bacteriological examinations. Samples of bleaching powder were also sent. In addition to the Karachi and Sukkur Water-works, samples of water were examined for the Royal Air Force, Drigh Road. A large number of samples were also received from the Sukkur Barrage Works, and various Government Officers in the mofussil, and local bodies also utilized the services of the laboratory. In all 1,440 water samples were examined bacteriologically and 1,141 chemically. Besides, 40 samples of bleaching powder and samples for estimation of dose of bleaching powder were also received.

One hundred and three samples of food stuff were examined. There were 57 samples of milk and 46 of ghee.

Eight hundred and eighteen samples of chemical interest were also examined.

The work of the laboratory is expanding every year as local bodies are taking greater advantage of its services. For instance among the numerous samples sent by the Karachi Municipality, there were 51 samples of milk, 29 of ghee, 636 specimens of throat swabs taken by the Medical Officer of Health, Karachi Municipality.

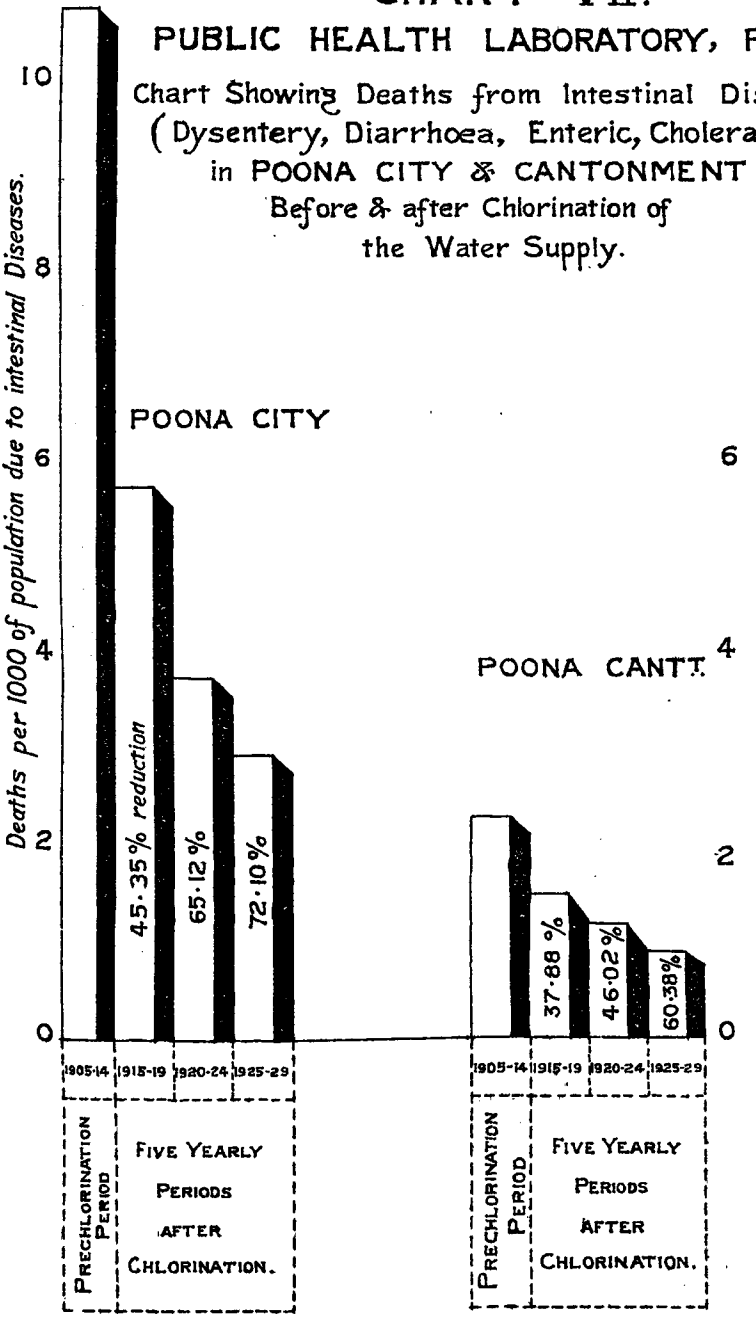
In addition to the work briefly described above, the laboratory deals with medico-legal, Excise, Government miscellaneous and general analytical work. The work done during the year under report may be summarised as follows :—

I. Medico-legal cases including the examination of various articles.
II. Samples of Store Department.
III. Samples of Excise Department.
IV. Miscellaneous.

CHART VII.

PUBLIC HEALTH LABORATORY, POONA.

Chart Showing Deaths from Intestinal Diseases.
(Dysentery, Diarrhoea, Enteric, Cholera Etc)
in POONA CITY & CANTONMENT
Before & after Chlorination of
the Water Supply.



I. The medico-legal cases investigated during the year were forwarded from 53 different stations and are arranged in classes as under :—

Class I—Cases of suspected human poisoning.—Samples from 53 different places were received. It involved 55 persons of whom 37 died. Poison was detected in 22 cases.

Class II—Cases of suspected animal poisoning.—Four cases were examined under this class and poison was detected in two only.

Class III—Cases of suspected staining with blood.—One hundred and forty-two cases were forwarded for examination, of which 95 were suspected of staining with blood and the remaining 47 were semen or with semen and blood. The total number of articles examined was 472.

Class IV—Miscellaneous cases.—In all 17 cases were examined under this class.

II. *Samples from the Excise Department.*—Two hundred and thirty-five samples were examined under this head and included salt, opium, liquor, etc.

III. *Samples from Government Stores.*—These included the analysis of restricted drugs. Cocaine, Ether and Chloroform, etc., 18 samples were examined under this head.

IV. *Miscellaneous.*—Fifty samples were examined under this head.

Fairs and Festivals.

100. *Pandharpur.*—The chief day of the Ashadi Fair fell on 6th July 1930. The total number of pilgrims who paid the tax was 135,811 and there were about 4,351 exemptions.

The medical arrangements for the pilgrims *en route* were made as usual.

The total number of Palkhis visiting Pandharpur was 21. All the Palkhis arrived at Wakhari, the last camp, before entering Pandharpur on the evening of 4th July 1930, with a clean bill of health. Pilgrims arriving at Kurduwadi were well looked after by the G. I. P. Railway, who arranged for the following convenience for their comforts.

The Health Officer of the G. I. P. Railway under the direction of District Medical Officer was on duty at Kurduwadi Station with a number of conservancy staff and looked after sanitation of the Station and also water-supply. The Civil Surgeon, Sholapur, made arrangements at Kurduwadi as usual by keeping a dispensary and the necessary drugs in charge of a Sub-Assistant Surgeon.

Arrangements at Wakhari.—Water was taken into the masonry tank from the Mhaswad Tank. It was alumed and permanganated. Trenches were provided and a temporary Infectious Diseases Hospital was opened.

Arrangements at Pandharpur.—The usual medical arrangements were ready well before the pilgrims began to arrive. Six Sub-Assistant Surgeons and 20 medical students were appointed. The incoming and out-going pilgrims were inspected at the Railway Station and at the Octroi Nakas. Three Sub-Assistant Surgeons and 12 medical students were employed

to detect cases of epidemic diseases. Ambulances were provided at important places for the removal of the sick to the Hospital.

Twelve Sanitary Inspectors and the usual extra staff of sweepers, scavengers, bhangis, etc., were also entertained.

Latrines.—Five sets of trench latrines on the four sides of the town were provided. One hundred and seventy-seven bhangis and 149 Mahars and Mangs were engaged to conserve the latrines. Guards were employed to prevent people from fouling the surroundings of the trenches.

All the refuse was promptly removed and burnt in incinerarors.

Food-supply.—All the hotel-keepers were made to clean and lime-wash their premises before the fair. The hotels and market were frequently inspected and any unwholesome food stuffs were immediately destroyed. The District Magistrate, Sholapur, prohibited the importation of mangoes into Pandharpur during the fair days. This order proved useful.

Water-supply.—The water-supply was chlorinated by means of a chloronom; in addition the water was permanganated throughout the fair days as a precautionary measure. The total quantity of 156,000 gallons per day was supplied. All the wells in and around Pandharpur were also permanganated regularly. The river bed was guarded day and night with a view to avoiding contamination of water in which the pilgrims bathe and sip.

Health of pilgrims.—Thirteen cases of cholera were admitted to the Infectious Diseases Hospital, 9 proved fatal.

At the Kartiki Fair at Pandharpur which is next in importance to the Ashadi, the attendance was 100,379. The usual additional medical and conservancy staff was employed.

Alandi.—The big day of the Kartiki fell on 16th November 1930. The Assistant Director of Public Health, Central Registration District, visited Alandi before and during the fair and made suggestions and supervised the arrangements. No cholera cases occurred.

Sanitary arrangements were also provided at Shinganapur (30,000 pilgrims) and at Shirala (22,000 pilgrims). All other smaller fair centres in the Central Registration District were free from any epidemic diseases.

In the Western Registration District, the principal fairs at Nasik and Trimbak were Nivritti in January, the Mahashivratra in February, the Ram-Navami in April and the Kartiki in November 1930. The number of pilgrims during these "Parvanis" varied considerably ranging from about 700 during the Kartiki Fair to 20,000 during the Nivritti Fair.

The Assistant Director of Public Health inspected the fair areas before, during and after the festivals at all odd hours and at times paid surprise visits.

The sanitary measures adopted at these fairs at Nasik included :—

The storage reservoirs, storage cisterns of the City and Indra Kund were sterilized and the usual sanitary measures, standardized during previous years, adopted.

At Trimbak chlorinated water was provided all through the day and night during festivals and public wells were regularly sterilized during the fair. The "Kushavarta", the sacred bathing tank, was treated with bleaching powder every evening during the fairs and a day before the fair. The tank was emptied and cleaned four times during the year, viz., January, February, May and July.

The public latrines were cleaned and disinfected twice a day. All private latrines were disinfected after the fair.

There were 78 attacks and 50 deaths from cholera, 98 attacks and 47 deaths from small-pox and 3 attacks and 3 deaths from plague at Nasik.

There was one attack and one death from cholera and 41 attacks and 2 deaths from small-pox at Trimbak.

Saundatti-Yellamma Fair (January, February, April and December) in the Belgaum District, Yamnur (March) in Dharwar District and Gokarn (March) in the Kanara District are the fairs to which people from all parts of the Presidency are drawn. The total number of pilgrims attending the fairs is about 10 to 50,000 at the Yellamma Fair, 60,000 at Yamnur festival and 30,000 at Gokarn. All the wells at these pilgrim centres were sterilized during the fair under the direct supervision of the Inspectors of Sanitation and Vaccination of the districts concerned.

Of the four fairs at Saundatti-Yellamma the one in January was the most important and was attended by a fairly large number of pilgrims. The Assistant Director of Public Health inspected the fair area in company with the President of the Municipality on the 14th January 1930. The conservancy staff engaged at the fair was found to be inadequate. It was suggested to the Municipality to have efficient supervision over the bhangis, coolies and sweepers. Other defects noticed regarding the camping grounds, water-supply, etc., were pointed out to the President of the Municipality with necessary advice to remedy them.

All the sanitary arrangements were made as usual. The Yenigund Tank on the Yellamma Hill was fenced by barbed wire so as to prevent over-crowding of pilgrims and consequent contamination of water and special watchmen were appointed to guard all the wells day and night. Rotten and raw fruits exposed for sale were destroyed. Temporary sweepers and bhangis were entertained to keep the fair area clean. The temporary urinals were constructed at convenient places for the use of pilgrims. A special dispensary was opened on the hill and was in charge of the Municipal Chief Sanitary Inspector. The total number of patients treated at the dispensary was 150 during the fair. Disinfectants were kept in stock with the Chief Sanitary Inspector for immediate use whenever required.

The Yamnur Fair.—The District Local Board was solely responsible for the sanitary arrangements at the fair. Details of the sanitary arrangements required were drawn up by the District Medical Officer of Health, Dharwar, and a proclamation under section 45 (1) of the Bombay District Police Act was issued by the District Magistrate with a view to give effect to the proposed arrangements. The water for drinking purposes from the three tanks was permanganated. Kunds

in the Benni Nala were disinfected every day both in the morning and evening. The water from the Yamnur Tank was supplied to the pilgrims by syphon arrangement to 8 cisterns, one standpipe with taps and two troughs from which pilgrims used the water. A special staff of 20 sweepers and 27 bhangis was entertained to keep the fair area and the latrines clean.

Five temporary slaughter houses were erected at convenient places and pits were dug for disposal of the offal.

A temporary dispensary was opened and kept in charge of a Sub-Assistant Surgeon.

The supervision of the sanitary arrangements was carried out by the District Local Board Medical Officer of Health and 3 Local Board Sanitary Inspectors. Two Vaccinators of neighbouring talukas and one Government Inspector of Sanitation and Vaccination were deputed for the fair duty.

Magic lantern lectures on small-pox and cholera were delivered.

The fair at Gokarn was held from 26th February to 2nd March 1931 the attendance this year being 13,000 to 14,000. The Gokarn Municipality was responsible for the Sanitary arrangements in the fair area. The Inspector of Sanitation and Vaccination was also deputed to look after the sanitary arrangements.

The Ashtadasha Fair at Gokarn which comes off every 50 to 60 years was held at Gokarn from the 26th April to 8th May 1930, the total number of pilgrims attending the fair being about 18,000 to 20,000. A special staff of 20 sweepers and 2 bhangis was entertained to conserve the fair area.

The Inspector of Sanitation and Vaccination delivered magic lantern lectures on different epidemic diseases. These fairs passed off with a clean bill of health.

The festivals at Vautha in Dholka Taluka and Shukaltirth in Broach Taluka were both held from 5th to 7th November 1930.

The Inspector of Sanitation and Vaccination was deputed for the fair duty at Vautha. Trench latrines were provided at suitable places with an adequate staff. Wells were permanganated before, during and after the fair. The fair passed off without any outbreak of disease. About 75,000 pilgrims attended this festival.

The fair at Shukaltirth was attended by about 5,000 pilgrims. The attendance was very low as compared with the number of pilgrims in previous years. It is due to the levy of the pilgrim tax of one anna that many did not visit and that pilgrims from Rajpipla State did not come in the fair area but stayed on other bank of the river where a regular fair was being held from the last year. Sanitary arrangements were satisfactory and the fair passed off without any outbreak of disease.

Manekthari Punem Fair at Dakor came off on the 7th October 1930, the attendance being 41,881 against 51,946 in the previous year.

There was no Medical Officer of Health under the Municipality and cholera cases were occurring in Panch Mahals and Surat Districts. The President of the Municipality was requested to make similar arrangements as were done last year.

The arrangements introduced during the fair were trench latrines with arrangements for privacy for males and females, painting of dust-bins, permanganation of wells every night, instructions against drinking Gomati Tank water, enforcement of provision of sanitary requirements of the theatres, inspection of pilgrims by Medical Officers and provision of Isolation Hospital. The Assistant Director of Public Health encamped at Dakore during the fair days and supervised sanitary arrangements. There was no epidemic.

The services of Inspectors of Sanitation and Vaccination and Vaccinators were placed at the disposal of the District Officials for fair duty whenever it was possible to do so.

The Lal Shahbaz Fair at Sehwan (Sind) was held from 19th to 21st January 1930 and was attended by 12,000 pilgrims. The decrease in pilgrims was chiefly due to economic conditions and partly due to the epidemic of cholera and other sickness prevalent at the end of the year 1929. No Government Medical Officer was deputed on fair duty. No arrangement for the medical inspection of pilgrims was done at Railway Station. The Municipal dispensary was kept open for the treatment of pilgrims.

The Inspector of Sanitation and Vaccination, Karachi District, was deputed to Sehwan on special duty in connection with the fair. He was in charge of the sanitation of the town. The water-supply was derived from wells and Aral Canal. The supply was maintained continuously day and night. The Inspector with the assistance of the Municipal Secretary sterilized all the wells used by pilgrims for drinking purposes.

No cases of infectious diseases occurred during the fair.

The Assistant Director of Public Health was present during the fair.

All precautionary measures were adopted in connection with the Kumbha Mela at Allahabad which comes off once in 12 years and was attended by pilgrims from all parts of India.

The Director of Public Health, United Provinces, was requested to intimate any case of cholera occurring among pilgrims from this Presidency to the Assistant Director of Public Health of the Division in case of pilgrims from mofussil and the Executive Health Officer, Bombay, where pilgrims from the City of Bombay were concerned, by wire.

It would be an additional safeguard and a very necessary one, if the pilgrims proceeding to Allahabad could be induced to get themselves inoculated against cholera. Facilities were provided for inoculating intending pilgrims at civil hospitals and dispensaries of pilgrim centres and Railway Junctions. Medical inspection of returning pilgrims was carried out at Ahmedabad, Godhra and Bhusawal Railway Stations.

All Revenue Commissioners and the Surgeon General with the Government of Bombay were requested to issue necessary instructions to all officers under them and all the local authorities in the divisions to render the Assistant Directors of Public Health the help they might require in carrying out their programme.

Sanitary Associations.

101. There were 17 Sanitary Associations working in the Presidency. All continued to do useful work as the following examples show :—

Karachi Health Association.—The Association maintains a Maternity Home named after Mr. Bherumal Thakurdas. This institution is reported to be gaining in popularity every year. During the year under report 1,053 maternity cases as compared with 851 in 1929 were conducted by the Association Midwives and supervised by Lady Health Visitors.

There were 6 midwives in charge of different quarters of the city, 8,482 house to house visits were paid by the Lady Health Visitors as against 4,323 in 1929 for supervising maternity cases and giving advice on the care and nurture of infants.

In the Bherumal Thakurdas Maternity House, 478 mothers availed themselves of the facilities provided. Of the 478 labour cases, 392 were normal, 13 were abnormal, and 73 other cases were treated. Out of these 73 cases, 4 were premature births, 28 abortions, 12 incomplete abortions, 7 miscarriages, 9 minor operations, 12 waiting cases and one septic case brought from outside for treatment. 598 expectant mothers were registered for confinement and treated by the Lady Doctor. 256 out-door expectant mothers were examined in different quarters of Karachi and treated by the Lady Doctor in the Maternity Home.

With a view to secure efficiency, the grades of pay of the members of the staff were revised during the year under report. The most notable event of the year was the registration of the Karachi Health Association under Government of India Act XXI of 1860. The constitution has thus been legalised and its scope enlarged so as to provide for Government nomination.

Statistics show that more than 75 per cent. of the delivery cases in Karachi are still carried on by untrained dais which is not a very satisfactory state of affairs.

At Hyderabad, the training of native "Dais" in maternity work was continued under the guidance of Miss Piggott whose organization has been extended to twelve centres. During the year 46 Dais were under supervision. Eleven Dais appeared for the examination and all passed : 67 were under training. 8,299 persons attended 227 lectures and 46 towns and villages were visited.

The outstanding event of the year was the opening of a class of Dais at Matli of the Tando Division (Hyderabad District). Ten Dais from the surrounding villages attended it.

The Honorary Secretary says, "We now have two good trained Dais at Tando Mahomed Khan and Badin who are in receipt of a stipend as long as their work is good. At Tando Bago the Mir hopes to start a dispensary for women and Maternity Home, both of which are badly needed".

Red-Cross and Health Societies, Hyderabad.—The activities of this Branch were mainly directed towards maternity and child welfare work.

Mrs. Hamid Ali Red-Cross Maternity Home, Larkana.—During the year under report 154 cases were conducted out of which 126 were in-door and 24 out-door. Not only maternity cases but gynæcological cases were also treated, 11,768 in-door and out-door cases were treated. The Home is being taken advantage of by the rich as well as the poor. Patients from the Municipal and the District Local Board areas are admitted to the Home.

In the Ishwarbai Maternity Home at Shikarpur, 370 cases were conducted out of which 365 were cured and 5 died.

The Broach Sanitary Association did much useful work as usual during the year.

The Demonstrator of the Association delivered 28 short lectures on health subjects with the aid of magic lantern in the different parts of the City, and 5 in the district. He also gave 29 demonstrations in the City and 5 in the district explaining the illustrated charts on different health subjects.

Six Travelling Health exhibitions were organized by the Association in the taluka towns of the district and a Health Show was organized at the Shukaltirth Fair. A special Health Show was also arranged at the Dasalwadi in Broach from 5th to 13th August 1930. It distributed 15,500 quinine tablets in 150 villages through the agency of the School Masters and the Mamlatdar of Broach and 4,200 quinine packets were distributed in the different parts of the City. In co-operation with the local Red-Cross Society the Association extended medical relief to 63 centres in the district and 3 in the Mill area of the City. 39,500 patients took advantage. It also distributed 146 eye-drop bottles with eye droppers freely in the City and in the district.

A qualified midwife engaged by the Association visited 115 cases in 5 different wards of the city and instructions were given for the care of babies and mothers. Two First Aid Classes were organised for the students of the Vernacular School and for the girls of the J. N. Petit's Girls' School.

The Association published and distributed leaflets on malaria, care of eyes, etc., prepared posters on maternity and child welfare and organised ambulance classes. One weighing machine was placed at the Raichand Deepchand Library for adult persons and 2 infant weighing machines were placed at the Aminabai Dispensary and at Dr. Dastur's Dispensary for weighing babies.

The Surat Sanitary Association did excellent work in co-operation with the Health Department of the Municipality in the matter of propaganda of vaccination during the period of small-pox epidemic. It delivered six cinema lectures at different places in the city attracting an audience of 2,150 persons. Eight lantern lectures on small-pox were delivered in the selected localities of the city.

The Ahmedabad Sanitary Association organised 54 magic lantern lectures in different parts of the City. In these lectures, slides on maternity and child welfare, water-borne diseases, cholera, house-fly,

tuberculosis, malaria, small-pox and temperance were exhibited. Dr. H. V. Tilak, Honorary Provincial Secretary of the Bombay Presidency Baby and Health Week Association delivered a lecture on "Follow-up Work in Health and Child Welfare" when Sheth C. P. Parekh, President of the Millowners' Association, presided.

Baby Weeks at Banja, Tagadi, Talod, Koth-Gangud and Detroj in the Ahmedabad District were organised in co-operation with the Bombay Presidency Baby and Health Week Association and consolation and other prizes were given. About 10,000 leaflets on various subjects on health and welfare were distributed at these places.

The Panvel Maternity and infant Welfare League.—This league has been in existence for some years and it maintains a Maternity Home at Panvel and also sends midwives to conduct labour cases in the homes of the mothers. The number of cases so treated has been increasing and in the year 1930 it was 107.

The Kolaba Maternity Hospital and Nursing Home.—The number of women and children treated in the out-patient department was 1,084 and 656 respectively while only 238 cases were treated as in-patients of which 131 were for maternity, 77 for medical and 30 for surgical aid.

The Maternity and child welfare centre, Tarapur (District Thana).—This centre was opened in January 1927 under the guidance of Dr. R. A. Barve, L.C.P.S. (Ed.), L.F.P.S. (Glas.). During 1928-29, the nurses visited 320 houses. The number of out-door patients was 340 while that of in-door patients was 35 including nine for abnormal operations.

The Arogya Mandal, Jalgaon.—The Mandal distributed hand-bills on small-pox and Influenza and explained preventive measures against Cholera to the public. As a part of child welfare scheme about 100 children were examined by Medical Officers and necessary advice was given to the parents.

The Red-Cross Society, Belgaum Branch.—287 antenatal cases, 268 infants and 107 toddlers, 661 post-natal cases were visited by the Superintendent of the Society. A good deal of educative work was done by the Travelling Dispensary started by the Society in rural areas. 549 Village Officers, Circle Inspectors, Police Officers, etc., were trained in the disinfection of water supply and local treatment of snake-bite with potassium permanganate. Lantern lectures on "Malaria, Plague, Small-pox and Child Welfare, etc." were given.

The Dharwar Sanitary Association has been merged into local branch of the Red-Cross Society. It carried on educative propaganda work in the district, the expenditure being met by popular contributions. 112 maternity cases were treated of which 29 were operation cases. In addition to this 60 cases were attended to in Dharwar at their houses by the Hospital Nurses. Eight midwives were maintained by the Society and were attached to the taluka dispensaries. The total number of maternity cases attended by them was 141. Four probationers were trained and came out successful. One of them has been working in the

Navalgund Dispensary, another in Co-operative Hospital, Hubli, and the remaining two are practising privately in Dharwar.

The Honorary Secretary of the Bijapur Red-Cross Committee reports that no tangible results have been achieved during the year in furtherance of the Committee's resolution last year to appoint a Health Organizer for rural health. Only a sum of Rs. 266-7-0 was spent on the supply of comforts to the Bijapur Civil Hospital. The Committee met only once in the year to transact business.

The Bombay Sanitary Association did good work during the year under report. Dr. D. S. Bhandarkar continued to act as a part-time lecturer in Hygiene to the working classes in their chawls where 57 lectures were given with the aid of Magic lantern slides and 93 in Schools.

From 1st November 1930 the Association appointed one Health Visitor with a view to visit daily in the morning the insanitary localities and chawls, to instruct the people in the prevention of any disease prevalent in the City, and to explain to them the simple measures that could be adopted for securing sanitary conditions in their homes. He has to report to the Health Department of the Municipality all cases where any sanitary action by the Municipal Inspectors may be necessary and to submit a weekly report of his work to the Honorary Secretary. The Health Visitor visited in all 122 chawls out of which 82 were represented to the Health Department for remedy of sanitary defects by Municipal agencies. He delivered 15 lectures during November and December 1930 to the occupants of the chawls in the open air with the aid of magic lantern slides.

The Cinema films on " Malaria ", " Fly Danger ", the " Rat Menace ", etc., were exhibited by the Association in 180 places in the city of which 105 were chawls, 14 High Grade Schools, 21 Public Institutions and 40 Municipal Schools.

The Association has prepared for public exhibition five models, four on malaria prevention and one on guinea-worm disease.

The Lady Wilson Village Maternity Association, Poona.—During the year the efforts of the Association were directed more towards consolidation than extension.

The work carried out at the various centres is given below :—

At the Poona Centre, two Dais were trained. The total number of Dais trained up to the end of December 1930 was 240.

In Dharwar District, 7 Dais were trained in two batches of 3 and 4, and the class lasted for three months.

In West Khandesh District, the district branch trained 2 Dais in the preliminary course under the local Medical Officers.

These Dais were trained at Erandol in East Khandesh District.

In Sholapur District 33 city Dais have undergone primary training of whom 18 passed and also 2 village Dais received training and passed. 13 village Dais were trained in secondary training; all of them passed.

In Belgaum District 2 Dais were trained.

Progress in the Northern Division is not satisfactory. The Assistant Director of Public Health went to Bombay and arranged with the Honorary Secretary, National Baby and Health Week, Bombay, for the secondary training of Dais. The District Committees were requested to inform the names of Dais who were willing to go to Bombay for secondary training and it is hoped that the training will shortly be commenced.

A meeting of the Executive Committee was held on 15th August 1930 when the work of allotting grants to the District Committees, application of District Committees to the Central Committee and such other work was transacted. It was also resolved that Committee had no objection to Dais and others being trained at the Panvel Maternity Hospital and Kolaba Maternity Association. The work of training Dais at Panvel Maternity Home has commenced.

The Lady Wilson Village Maternity Association, Sholapur District, has made an arrangement with the Sholapur Maternity and Infant Welfare Association for the training of Dais. Training is given once in a week extending over six months. Each Dai is given annas two for attending the class. Each Dai is made to witness five cases and to conduct five. On passing each Dai is given an outfit, a white saree and a certificate. A village Dai on the completion of her training is given Rs. 20 and a white saree and on passing, an outfit and a certificate.

Training classes for indigenous Dais were held in the Civil Hospitals of Belgaum, Dharwar and Karwar. Two Dais from Gokak were trained in the Civil Hospital, Belgaum. The period of training was three months. They were provided with lodging and boarding expenses.

In the Dharwar Civil Hospital, thirteen Dais were trained, six from Dharwar and three from Hubli. A scholarship of Rs. 10 each was given per month with free quarters for lodging.

Three Dais, one from Yellapur and two from villages in Kumtha Taluka were trained. The period of training in two cases was 15 days, and in the third one it was three months. The Dai at Yellapur was paid As. 5 and the other two of Kumtha Taluka at As. 6 per diem for their boarding and lodging.

Other Associations worked according to the indications of local requirements and opportunities.

Health and Baby Week.

102. The Health and Baby Week movement made further progress in the Presidency, celebrations being held in many important towns.

The Assistant Directors of Public Health helped in the work of organization and gave lectures and demonstrations.

In the Sind Registration District the District Local Board, Sukkur, organized the Baby Week at Mirpur Mathelo on the 11th and 12th

February 1930. The show room was decorated with several health pictures and there were several models, exhibits and posters, etc. Miss Ward on behalf of the Missonary Society attended the show with her travelling exhibition and entertained the audience and especially the females with short discourses on health and Child Welfare. Pamphlets on these subjects were distributed free to the public. About 125 babies were brought to the show by their mothers and seventeen prizes were given to them according to merits by Mrs. Hood, the wife of the Collector. The Assistant Director of Public Health, the Collector of Sukkur and the Civil Surgeon attended the show. It was the first time that the show was held in rural area in the district.

In the Gujerat Registration District the Ahmedabad District Local Board gave a sum of Rs. 150 for Baby Week activities in rural areas to the Honorary Divisional Secretary, Gujerat, and Baby Weeks were organised at Talod, Prantij taluka on 12th and 13th March 1930 and at Bareja, Daskroi taluka on 16th and 17th of the same month. Six travelling Health Exhibitions were organized by the Sanitary Association, Broach, in the taluka towns of the District in School buildings and dispensaries and a Health Show was organized at the Shukaltirth Fair. A special Health Show was celebrated at the Dasaladwadi in Broach City from 5th to 13th August 1930.

In the Central Registration District, Mr. G. K. Devadhar, C.I.E., together with his assistant, Mr. Sharangpani arranged cinema shows with the help of the Bombay Presidency Baby and Health Association's cinema machine and the operator in about ten villages under the influence of the Rural Up-lift Centre at Khed-Shivapur (Poona District).

The Medical Military Authorities at Kirkee arranged for a cinema show at the Indian Military Hospital, Kirkee (East) in which interesting health films were shown to sepoys and child welfare films and general health films to women only.

In the Western Registration District the Bombay Presidency Baby and Health Week Association actively co-operated with the Assistant Director of Public Health, Western Registration District, in organizing the Rural Health Section in the Divisional Agricultural Exhibition held at Nasik between 8th and 14th December 1930. The Rural Health Section contained ten stalls in which charts, exhibits and models were arranged. The following models, among others, were prominent. Plague, Cholera, Malaria, Sanitary and insanitary houses, Untrained dais and creche, Vaccination, Consumption, etc.

The Inspectors of Sanitation and Vaccination, Nasik District, looked after the arrangements all the while. The nurses and the lady doctor of the Nasik branch of he Poona Seva Sadan Society explained the models dealing with infant welfare and maternity. Rush of agriculturists revealed the interest taken by them in health hints suggested by the models. Mrs. Tara A. Dabholkar, B.A., delivered a lecture on maternity and child welfare.

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Full advantage was taken of the cinema apparatus. About 50,000 persons were estimated to have attended the Agricultural Show.

At Mahad (Kolaba District) the Baby Week was celebrated in December 1930.

In the Southern Registration District two Baby and Health shows were organized one at Chikyedachi from the 17th to 19th December 1930 in Kod and another at Shelvadi from 9th to 18th October 1930 in Nawalgund talukas of Dharwar District by the Mamlatdars and Honorary Secretaries of the Baby Week Committees. Rao Saheb Dr. Kumbhakonum, Honorary Divisional Secretary for Karnatak, sent models from Hubli for the show. Magic lantern lectures on Plague, Malaria, Guinea-worm were delivered. The Collector of Dharwar who delivered a good impressive lecture, distributed prizes to the selected babies. The Divisional Secretary, Dr. Kumbhakonum attended the show and delivered a lecture on "How to bring up the children and how to take care of babies and their mothers before and after confinement".

The show at Chikyedachi was celebrated under the Presidentship of the Assistant Collector, II Division, Dharwar. The show was open from the 9th to 16th February 1930 in which eight lectures on cleanliness, Guinea-worm, Midwifery, Care of babies and Infectious diseases were delivered by School Masters, Mamlatdars and the Honorary Secretary of the Baby Show Committee to the people assembled at the show from neighbouring villages. Prizes were distributed to the selected babies. The important feature of the show was that Waddars and depressed class people took part in it.

Health of Industrial Workers.

103. The Assistant Directors of Public Health continued their inspection of factories (under the Act of 1911) in the course of their tours submitting copies of their reports to the Managers and Chief Inspector of Factories.

The Assistant Director of Public Health, Sind Registration District, inspected the following factories, viz. the Assandas Hariram rice husking and flour grinding and the Century Flour factories at Jacobabad and Shikarpur respectively.

The Assistant Director of Public Health, Gujarat Registration District, inspected the Chandroday Spinning and Weaving mill at Viramgaon, Ahmedabad District. The mill is situated near the inhabited area and the railway station and the accommodation was sufficient. Water for drinking purposes in the mill is derived from the well and the bore and distributed through pipes. As regards the disposal of the waste water it was noticed that the water from Dhobighat was taken through an open drain, interposed by three settling pits to a deep tank. The size of the settling pits was too small for the volume for effective clarification of the water running through them. It was, therefore, recommended that these pits should be $8' \times 8'$ each, the open

drain should be converted into an underground drain and the final tank should be a covered tank or should have side walls sufficiently high to prevent the foul air from entering the Bai Uji's Chawl and that if the above suggestions about a final tank could not be carried out arrangement should be made to take the waste water into Survey No. 176 or 177 for disposal.

The windows were not kept effectively open. Glass windows and electric light were satisfactory.

There was a dispensary and a rudimentary creche.

The Assistant Director of Public Health, Western Registration District, inspected two mills at Chalisgaon, Ram Iron Works at Pachora and Tata Hydro Electric Power House Supply at Khopoli.

No factories were inspected by the Assistant Director of Public Health, Central Registration District.

The Assistant Director of Public Health, Southern Registration District, inspected 2 mills and 2 factories at Hubli. The factories were cotton ginning and pressing. Arrangements as regards light and ventilation were defective. Neither conservancy nor arrangements for drinking water were satisfactory. There were no maternity benefits given to the employees nor is a school maintained.

Floods in Sind and Gujerat.

104. *Sind.*—The floods in Sind this year especially in its upper portion were due to abnormal rise of water in the Indus and breaches in the river and the canals. The Districts most affected were Sukkur, Larkana and Nawabshah. The rain-fall in Sind during the year though somewhat abnormal in some parts was not responsible, to any appreciable extent, for the floods in Upper Sind.

The following talukas were most affected by floods :—

District.	Talukas.
1. Sukkur.	1. Sukkur.
	2. Shikarpur.
	3. Garhi Yassin.
	4. Pano Akil.
	5. Ubauro.
2. Larkana.	1. Dadu.
	2. Warah.
	3. Sehwan.
	4. Kambar.
	5. Kakar.
3. Nawabshah.	1. Naushahro.
	2. Kandiaro.
	3. Sakrand.
	4. Moro.

On receipt of information regarding the floods on the 26th of July 1930, the Assistant Director of Public Health, Sind, visited Sukkur and Shikarpur towns and the other affected areas in company with the Collector of Sukkur and interviewed the Municipal and Local Board Authorities.

In Sukkur the Assistant Director of Public Health visited several Refugee Camps in company with the Civil Surgeon and the President of the Municipality and offered such advice as was considered necessary in the interest of public health. In Sukkur nearly 30,000 refugees were lodged. Besides a considerable number were living in private houses with their friends and relations. 23 extra scavengers and sweepers were engaged. All precautionary measures were adopted as regards the health of the refugees.

Shikarpur Town was practically evacuated including the sweepers and scavengers. Out of 263 sweepers and scavengers only about 20 were working, evidently no scavenging or conservancy work was being done in the beginning. The Medical Officer of Health, Shikarpur, however, persuaded the sweepers to resume their work after granting their demands as to the safety of their lives. Wells were disinfected with potassium permanganate. Tanks and hollows that were full of water were treated with Paris Green. Town refuse was removed by engaging additional carts. The Shikarpur Municipality purchased the following medicines through the Assistant Director of Public Health :—

Potassium Permanganate Pills	5,000
Potassium Permanganate Powder ..	25 lbs.
Quinine tablets (5 grain)	20,000
Bleaching Powder	1 cwt.
Formaline	5 lbs.
Paris Green	10 lbs.
Cholera Vaccine	100 doses.

The Commissioner in Sind placed a sum of Rs. 5,000, out of the Sind Relief Fund, at the disposal of the Assistant Director of Public Health, for medical relief in Sind in connection with the floods. Informal meetings with Collectors, Civil Surgeons and Presidents of Local Boards and Municipalities were held at Sukkur, Larkana and Nawabshah and measures to be adopted were discussed. 500 small tins called " Village emergency outfits for Cholera and Malaria " were prepared and sent to the Collectors for distribution in the several flood affected villages. 100 more outfits were prepared and 50 were supplied to the President, District Local Board, Sukkur, and 50 were kept in the Assistant Director's office as emergency stock. The person entrusted with the outfit was made responsible for making full use of it immediately a cholera case occurred.

In view of the possibility of outbreak of malarial fevers, the Assistant Director of Public Health, Sind, issued instructions to all local bodies of the flood affected areas in connection with (*a*) draining of pools of water which formed fertile breeding places of mosquitoes, (*b*) oiling of the pools in and around the villages with larvicides like crude oil, by village school masters, pound munshis etc., once a week. For this purpose 4,000 gallons of crude oil were supplied to Sukkur District and 3,960 gallons to Larkana District. Four talukas of Nawabshah District which were badly affected by floods were supplied with some quantity of crude oil. During the year 919,450 quinine tablets (5 grs.) and 2,583,730 (2 grs.) of quinine were supplied to various officers and agencies in Sind.

In the flood affected district, quinine tablets were supplied as follows :—

Nawabshah	.. 1,46,600 (5 grs.)	3,45,150 (2 grs.)
Sukkur	.. 1,05,600 (5 grs.)	7,06,000 (2 grs.)
Larkana	.. 2,91,250 (5 grs.)	6,15,000 (2 grs.)

As considerable amount of sickness was expected specially in flood affected areas, 5 Touring Medical Officers were appointed on anti-malarial duty from the Sind Relief Fund and 2 were appointed at the cost of the District Local Board, Sukkur. The President, District Local Board, Nawabshah, appointed one Touring Medical Officer for Sakrand taluka. Quinine, Cholera pills, Potassium Permanganate Powder and anti-cholera vaccine were supplied by the Assistant Director from his office stock and the other medicines were purchased from the funds placed at the disposal of the Assistant Director by the Commissioner in Sind.

The Vaccinators and Inspectors of Sanitation and Vaccination were also supplied with cholera medicines, quinine pills for use when they went for vaccination work in villages.

As these prompt measures were adopted no outbreak of cholera occurred. Even malaria which was expected in a severe form was less prevalent than in previous year.

Gujerat.—On the 18th September 1930, the Collector of Surat reported to the Assistant Director of Public Health, Gujerat Registration District, that the river side villages of Chorashi and Olpad talukas were affected by the flood in the river Tapti and requested him to depute some responsible officer to look to the sanitary arrangements of those villages. The Inspector of Sanitation and Vaccination of the District visited 14 flood affected villages of Chorashi taluka and the Assistant Director visited Bhatha village of Chorashi taluka and Sayan and Shivan villages of Olpad taluka. It was observed that in some villages, the flood water had entered the wells and so these wells were got effectively disinfected.

Personal proceedings.

105. The activities of the officers in charge of the Public Health Laboratories are detailed above.

Supervising staff.—The following table shows the various officers who held the appointments of Director and Assistant Directors of Public Health and the Director, Vaccine Institute, Belgaum, during the year under report :—

Appointment	Name	Period	Remarks
Director of Public Health.	Dr. J. D. Munsiff, M.R.C.P., F.R.C.S., D.P.H. (Edin.).	1st January to 20th February 1930.	Died on 3rd March 1930.
	Dr. R. V. Shiveshwarkar, B.A., M.B.B.S., D.P.H.	21st February to 5th March 1930.	
	Dr. J. L. Pinto, D.P.H.	6th to 31st March 1930.	
	Dr. Accacio da Gama, L.M. & S., D.P.H., D.T.M. & H.	1st April to 31st December 1930.	
Assistant Director of Public Health, W. R. D.	Lt. Col. A. G. Tresidder, C.I.E., I.M.S.	1st to 14th January 1930.	
	Major A. Y. Dabholkar, M.C., I.M.S., D.P.H.	15th January to 31st December 1930.	
Assistant Director of Public Health, C. R. D.	Dr. R. V. Shiveshwarkar, B.A., M.B.B.S., D.P.H.	1st January to 31st December 1930.	
Assistant Director of Public Health, Southern R. D.	Dr. K. A. Gandhi, M.B.B.S., D.P.H., D.T.M. & H.	1st January to 31st December 1930.	
Assistant Director of Public Health, G. R. D.	Dr. S. A. Talib, M.B.B.S., D.P.H.	Do.	
Assistant Director of Public Health, Sind R. D.	Dr. Accacio da Gama, D.P.H.	1st January to 26th March 1930.	
	Lt. Col. I. D. Jones, I.M.S.	27th March to 6th April 1930.	
	Dr. J. L. Pinto, D.P.H.	7th April to 31st December 1930.	
Director, Vaccine Institute, Belgaum.	Dr. J. B. Mama, L.M. & S., D.P.H.	1st January to 14th November 1930.	
	Dr. K. A. Gandhi, M.B.B.S., D.P.H., D.T.M. & H.	15th November to 31st December 1930.	

The Assistant Directors of Public Health visited 564 towns and villages during the year making reports to the local authorities as usual. Dispensaries, schools, police lines, factories, proposed sites for Government buildings, etc., were inspected ; courses of lectures in hygiene and public health were delivered to students at the Medical Schools of Poona. Ahmedabad and Hyderabad (Sind) and the students of the Police Training School at Nasik.

The Assistant Director of Public Health, Western Registration District, made a complete survey of 14 towns, Sanitary Committees and Village Panchayats; 13 towns were visited for general advice and 108 towns and villages for vaccination. He made remarks in one Village Sanitary Inspection Book and the Inspectors of Sanitation and Vaccination in 9.

He gave opinion on 24 reports of water analysis received from different parts of his Division and inspected water-supplies at Nandurbar, Jalgaon and Trimbak and made suggestions as to their improvements. He also inspected 14 school sites, 3 sites for night-soil depôts, one for urinal, one for drainage, one for a fish market, one for a burial ground and two for play grounds. He visited 5 dispensaries and two Ayurvedic dispensaries and inspected 4 factories. On account of the floods he paid special visit to Shirpur.

Seven schools were inspected and remarks were written in Visitors' Books. He took active part in the organization of the Baby Week at Nasik. Meetings were arranged in most places with local authorities for discussing preventive measures against epidemic diseases.

Interviews with heads of Local Bodies, heads of districts and other Government officers, Provincial Secretaries of the National Baby Week, Bombay Presidency, were included among the activities.

Classes for Village officials were held by the Inspectors of Sanitation and Vaccination during the monsoon. Four thousand five hundred and sixty-six village officers and 1,054 Talatis attended the course.

He took Dr. Jacocks, Adviser in Public Health, Travancore State, round Nasik and showed him the sanitary arrangements made for the fairs, bathing ghats, Nasik System of trenching night-soil and burning ghat. He also explained to him the working of municipalities from the public health point of view.

The Assistant Director of Public Health, Central Registration District, gave advice on public health matters in the case of 15 towns and 17 Village Panchayats. He also visited 72 towns and villages for sanitary purposes and 47 for vaccination purposes. He wrote remarks in one Village Sanitary Inspection Book while the Inspectors of Sanitation and Vaccination in 13.

The Assistant Director of Public Health attended the meetings of the Lady Wilson Village Maternity Association in Government House and also the meetings of the District Committees of that Association at Poona, Satara and Sholapur. He visited Nagpur in connection with the All-India Conference of the training and work of indigenous dais.

The activities of the Assistant Director of Public Health in connection with cholera were as follows :—

The first case was reported from Kondwe Kd. in Haveli Taluka (Poona district) in June but on personal investigation it was found that the case was not of cholera; no further case was reported. He visited Alandi, Wakdewadi, Bhosari, Bopodi, Dehu, Hadapsar and Yeravda to investigate the origin of cholera.

He went round with Dr. Jacocks, Honorary Adviser in Public Health, Travancore State, in connection with the incidence of malaria in the

suburbs of Poona City, viz. Yerandavana, Hingne and visited Health School of the Seva Sadan Society. At Pandharpur he showed him trenches, incinerators, the baris, ventilation of the temple, vaccination work at the Orphanage and camping ground of palkhis and the process of the purification of the water-supply.

He attended the Legislative Council in Bombay during the discussion of the budget of the Public Health Department.

He investigated into the causes of the prevalence of phthisis at Ahmednagar. The School children were examined in connection with tuberculosis. He inspected drains, vegetable market, dust-bins and made enquiries about the disposal of night-soil.

He delivered a lecture on " Prevalence of tuberculosis its causes and immediate measures to be taken to reduce the mortality " and examined children for gland index at Kedgaon, Karmala, Belgaon, Ahmednagar, Arangaon and Jamkhed.

At Mahableshwar he discussed the question of drainage scheme for the bazar area and also for the Morarji Castle with the Superintendent of Mahableshwar.

During his tour the Assistant Director inspected one Rain-gauge and advised the Sar Panch and the Secretary of the Village Panchayat Committee, Mirajgaon, in connection with well privies and filter pits to avoid soil population. Similar instructions were also given to the Sar Panchas of Karjat and Jamkhed who agreed to construct them.

In addition to the usual four fairs at Pandharpur, viz., Ashadi, Kartiki, Maghi and Chaitri, he attended the fairs at Shingnapur, Alandi, and Dehu and inspected sanitary arrangements.

He selected four sites for schools including one for play-ground, two for night-soil depôts, one for septic tank, one for market. He inspected three dispensaries and the Mission House at Kedgaon.

He visited Khatav (Satara district) and Baramati (Poona district) in connection with perennial irrigation.

He delivered lectures in Hygiene to the students of the B. J. Medical School, Poona.

The Assistant Director of Public Health, Southern Registration District.—Complete sanitary surveys of three towns and five Sanitary Committees and Village Panchayats were carried out. He visited 161 towns and villages for the inspection of sanitation and in connection with plague and 119 for vaccination purpose. He entered remarks in 12 Sanitary Inspection Books and the Inspectors of Sanitation and Vaccination in 34.

He inspected eleven sites for burial grounds, eleven for village extension, four for sinking wells, 3 for police lines, one for night-soil depôt and 10 for construction of schools. He attended six fairs and also inspected three factories.

The Assistant Director of Public Health went round the infected localities in Belgaum, Dharwar, Hubli and Nipani towns with the Director of Public Health, arranged informal meetings of Municipal Councillors and local Medical Practitioners and discussed the situation in the respective towns from the public health point of view.

Twenty-two villages and towns in Bijapur district, nineteen in Belgaum district, and seven in Dharwar district were visited by the Assistant Director in connection with anti-cholera measures taken by the Dispensary Medical Officers and Special Inoculators appointed for the purpose and gave instructions to the Village Officers, Mamlatdars and others concerned for preventing the spread of the disease.

With a view to take steps to reduce the incidence of plague he convened informal meetings of Municipal Councillors at Byadgi, Ranebennur, Bagalkot and Gadag towns and visited specially 11 towns and villages for the purpose.

As a result of the advice rendered, ratting operations were undertaken by Gadag-Bettegeri, Hubli and Ranebennur Municipalities and the Village Panchayat Committee at Shiggaon.

Meetings of leading villagers were convened at Kagwad and Shirguppi villages in Athani and Chikodi talukas of the Belgaum district and short lectures were delivered by the Inspector of Sanitation and Vaccination in vernacular in the presence of the Assistant Director of Public Health persuading the people to go in for inoculation against plague.

The Assistant Director of Public Health visited Hubli and saw small-pox cases with the District Medical Officer and discussed the situation with the local Medical Practitioners. He also saw cases in the Criminal Tribes' Settlement and gave advice. He discussed with the President and Municipal Councillors in Gadag town at an informal meeting the preventive measures to be adopted in connection with the epidemic in the town propaganda work with the help of magic lantern, isolation of the sick and disinfection of infected houses and vigorous vaccination campaign throughout the town were advised. He visited Shiggaon in Bankapur taluka with the Medical Officer of Health, District Local Board, Dharwar, in connection with small-pox.

He interviewed the Commissioner, Southern Division, in the matter and requested him to ask the Collectors and other Revenue Officials to give all possible assistance to the vaccinators.

The Assistant Director of Public Health visited Yellapur to inspect the water-supply for the camp of His Excellency the Governor of Bombay and gave detailed instructions to the Inspector of Sanitation and Vaccination in connection with the disinfection of water-supplies regularly.

Owing to the scarcity of drinking water-supply at Hubli people were resorting to wells and tanks for water for drinking purposes. The Assistant Director of Public Health advised not to use the water of disused wells unless they were systematically disinfected. All municipal drinking water-wells were disinfected with permanganate of potash.

Sites for wells at Tallur in Parasgad taluka, Devarshigihalli and Degam in Sampgaon taluka and Sankeshwar in Hukeri taluka were inspected by the Assistant Director of Public Health at the request of the District Local Board. He approved of these sites from the public Health point of view.

He gave opinion on the chemical analysis figures of the sample of water from a tap at Bijapur. It showed evidence of contamination. He advised that monthly samples from one and the same source should be got analysed to see variations in the quality of the water during different seasons. He also gave opinion on the chemical analysis of water from the well in the compound of Divisional Forest Officer, Belgaum. The figures did not show any objectionable features.

The Assistant Director of Public Health inspected the Agricultural Farm and School at Devi-Hosur, Dharwar taluka and advised how to minimize the incidence of malaria in that area.

He visited the Karwar Jail in connection with the epidemic of dysentery prevailing there. He inspected Jawali Nalla in company with the District Medical Officer of M. S. M. Railway, Hubli, in connection with the incidence of malaria. He also inspected the railway premises at Alnavar and Londa with the Special Medical Officer on malaria duty and suggested preventive measures.

He inspected the stock of quinine in the Post Office at Sindgi. Quality of quinine examined was found to be good.

The Assistant Director of Public Health attended the quarterly meetings at the Hindalgi Jail and advised the Medical Officer in connection with anti-plague measures taken.

He wrote remarks in the Visitors' Books maintained by the dispensaries at Gokarn, Kumtha, Mundgod and Supa.

Regular annual classes were held at the district headquarters of Belgaum and Dharwar by the Revenue officials and the Inspectors of Sanitation and Vaccination were directed to deliver lectures on " Village Sanitation ", " Personal Hygiene and cause and prevention of Infectious Diseases " on the days and hours fixed for the purpose. 730 patels and 414 talatis received instructions in these classes. The Mamlatdars and Mahalkaris, Members of the Taluka Local Boards and Panchayat Committees, Sub-Inspectors of Police, and staff of the Mamlatdars' offices etc. were present at these classes whenever it was convenient for them.

The Assistant Director of Public Health, Gujarat Registration District.— Complete sanitary inspection was made of five municipal towns and ten Village Panchayats and Sanitary Committees and advice given to seven towns. Twenty-seven towns and villages were visited for sanitary purposes and 99 for vaccination. He entered remarks in 12 Sanitary Inspection Books while the Inspectors and Sanitation and Vaccination in 27.

He inspected five dispensaries and four rain-gauges, 11 sites for schools, 2 for police lines, one for dispensary, one for urinal, two for cemetery, one for factory, one for Leper Asylum and 4 for other purposes. Opinion was given on 13 reports of analysis of water samples.

He attended the Manekthari Punem fair at Dakor and supervised the sanitary arrangements made by the Municipality as there was no Medical Officer of Health employed.

He delivered the usual course of lectures and demonstrations in Hygiene to the students of the Medical School, Ahmedabad.

In 27 villages recommendations were made to the local authorities concerned and remarks were made by the Assistant Director of Public Health and the Inspectors of Sanitation and Vaccination in the Sanitary Inspection Books urging the necessity for assigning separate plots for the storage of manure of the removal of the same from the surroundings of sources of drinking water-supply.

In all villages visited the Birth and Death Registers were scrutinized, checked and remarks entered in the Epidemic Registers of small-pox, plague, cholera and influenza. Vaccination registers where available were also inspected.

He carried out the Malaria Survey of the Matar taluka and conducted an enquiry regarding the prevalence of phthisis in Ahmedabad City and Mill areas. He also investigated the cause of incidence of influenza and pneumonia at Shivrajpur Manganese Mines.

He attended the quarterly Jail meetings of the Ahmedabad Central Prison, Sabarmati.

Owing to the Civil Disobedience Movement the classes during the monsoon were not held by the Inspectors of Sanitation and Vaccination for village officers except at Ankleshwar where 24 patels and 10 talatis attended.

Side by side with the malaria survey, sanitary inspections were continued and efforts were made to persuade the Ahmedabad, Viramgaon, Broach, Surat, Nadiad, Bulsar and other Municipalities to adopt adequate anti-small-pox measures. These all and in particular the Viramgaon, Broach, Surat and Bulsar Municipalities were persuaded to make vaccination compulsory and the Viramgaon and Surat Municipalies agreed. A refrigerator was got installed by Ahmedabad Municipality after a long correspondence with the Medical Officer of Health in the matter of the wastage of lymph and after some penetrating personal inquiry from ward to ward and discussion with the President of the Municipality. This resulted in saving of the loss lymph which was a very old standing wastage alleged till this inquiry to be unavoidable. The installation of the refrigerator also did away with the discontent of the public and consequent avoidance of vaccination of their children.

The Assistant Director of Public Health, Sind Registration District, inspected the sanitary condition of 5 towns and villages. He also visited 30 towns and villages for other sanitary purposes and 36 villages for vaccination purposes.

He gave opinion on 16 reports of the analysis of water samples, approved one site for a school, one for Fish manure factory and inspected 3 factories. He visited the Pilgrims Camp at Karachi and suggested to the Superintendent of Vaccination that the lymph number should be entered in over to check the vaccination work and also to detect any deterioration in the quality of lymph ; arranged for stations with a view to carry each Mass Vaccination in consultation with the Medical Officer of Health, Karachi Municipality and visited the Hab

river to inspect new water-supply for Karachi town in company with Executive Engineer, Karachi Municipality and the Officer in charge Chemico Bacteriological Laboratory, Karachi, and made suggestions as to its improvement.

He visited Shikarpur as desired by the Commissioner in Sind to go round with him in connection with the sanitation of the town.

He inspected the tanks at Kambar (Larkana district) in company with the President of the Municipality.

He attended the Lal Shahbaz fair and supervised the sanitary arrangements. He also attended the Baby Week at Mirpur Mathelo (Sukkur district) organized by the District Local Board.

He visited Mirpurkhas (Thar and Parkar district) to see the Vice-President, District Local Board, in connection with the preliminary arrangements for Mass Vaccination.

In view of the expected epidemic of small-pox a programme for Mass Vaccination was drawn up. With a view to meet the demand for lymph promptly a Frigidaire was installed in the office of the Assistant Director of Public Health for storing lymph, etc. the cost being borne proportionately by District Local Boards.

He visited Hyderabad Central Jail in company with the Inspector General of Prisons, Bombay Presidency, in connection with the outbreak of influenza, Kotri (Karachi district) at the instance of the Collector to see the site where the drainage of Railway Quarters was discharging.

He inspected the work of Touring Medical Officers of Hala, Badin, Kambar, Manjhand, Dadu and visited Bhaledinabad, Moladad, Kadirpur, Langha, Pathan and Tatta in connection with malaria.

He delivered lectures in Hygiene to the Medical students of Hyderabad.

Dr. J. L. Pinto, D.P.H., visited Sukkur to select the site for the settlement of Criminal Tribes at the request of the Officer, Criminal Tribes Settlement, Dharwar, and also inspected the new vaccination station started in Barrage township which was reported to be inevitable.

He attended the conference convened by the Collector of Hyderabad to investigate into the question of improvement of drainage of storm water in the town and its vicinity and also scrutinized the Hyderabad Drainage Project and the location of the sewage farm as desired by the Executive Engineer, Poona Drainage Division.

He visited Mahar (Larkana district), Shikarpur and Khanpur (Sukkur district) to see the health conditions of the flood affected areas and also to co-ordinate work of the touring Medical Officers.

He went round the town of Larkana in company with the Civil Surgeon, Larkana, and the Chief Officer of the Larkana Municipality to see the flood refugees and gave the necessary advice.

He visited Nawabshah, Shikarpur and Sukkur in company with the Director of Public Health for the Government of Bombay in connection with floods.

He visited Hyderabad to see the places complained of by the Health Vigilance Association, Hyderabad, which were causing a nuisance to

Hirabad Quarter and also to advise on the improvement scheme prepared by the Hyderabad Municipality.

He interviewed the Mir Saheb of Tando Bago in company with the Sub-Divisional Officer, Sind Sanitary Sub-Division, in connection with the filling up of Khads near Lawrence Madressah complained of to be breeding places of mosquitoes.

During the year under report the Assistant Director of Public Health maintained a stock of 249,300 quinine pills of 5 grains each and 26,100 of 2 grains each. Out of 33,579 pills of 5 grains were distributed by Inspectors of Sanitation and Vaccination and Vaccinators in 2,006 villages among 3,623 persons against 64,323 tablets and 162 powders in 1926 villages among 6,035 persons in 1929. The services of the Inspectors of Sanitation and Vaccination were utilized for free distribution of quinine in malarious tracts, and also for carrying out preventive measures against cholera. They inspected the sanitary condition of 28 villages and examined 5,602 children in 118 schools of whom 1,034 were found with enlarged spleens.

List of omissions in Birth and Death Registers for 1,375 births not recorded by the Tapedars were received from the vaccinators. These lists were forwarded to the Collectors for necessary action. The Tapedars at fault were warned and the entries were ordered to be made in the Birth and Death Registers.

Inspection work of the Assistant Directors of Public Health and Inspectors of Sanitation and Vaccination.—The Assistant Directors of Public Health inspected 22,715 (or 2·42 per cent.) vaccinated persons in 611 towns and villages and travelled 38,924 miles. The Inspectors of Sanitation and Vaccination inspected 185,737 persons in 7,546 towns and villages travelling 94,169 miles. Thus the results of 208,425 vaccinations or 22·26 per cent. of the total number performed were checked by examination. The success rate of primary vaccination as ascertained by the Assistant Directors of Public Health was 94·44 and by Inspectors 84·43.

The Director of Public Health for the Government of Bombay.—Dr. J. D. Munsiff, D.P.H., visited Surat in February 1930 with a view to investigate the causes of high mortality from pneumonia and discussed the preventive measures with the Municipal Councillors. His successor, who was acting for the time being in his place visited Surat and made certain preliminary enquiries. Later, Dr. A. da Gama, D.P.H., visited again the place and examined the situation personally.

Thirty-seven towns and villages were visited in connection with water-supply, drainage, investigation into the causes of epidemics and general sanitation.

He inspected the water-supply at Mahableshwar, Hyderabad, Sukkur, Karachi, Nasik, Trimbak, Alandi, Sholapur, Surat and Ahmedabad and also visited the Tansa Water Works (Bombay) with a view to see how the chlorination plant is working.

He visited Sind in August 1930 in connection with floods. He drew up a "Warning Note" against cholera and also held meetings of the local bodies with a view to discuss and to adopt preventive measures against the epidemic.

He attended the Ashadi fair at Pandharpur, the Kartiki fair at Alandi and the Manekthari Punem fair at Dakor and inspected the sanitary arrangements.

He attended the meetings of the Central Jail, Yeravda, and of the Infectious Diseases Hospital, Poona.

He was appointed a member of the Conference of the local bodies and Government officers to settle the question of the future management of the Infectious Diseases Hospital, Poona, and of the contributions due from the several bodies.

He was a member of the Malaria Advisory Committee, Bombay City, and Anti-Malaria Committee and also of the British Empire Leprosy Relief Association (Indian Council), Bombay Presidency Branch. He was a member of the Executive Committee of the Bombay Presidency Baby and Health Week Association and attended their meetings.

He was the Secretary of the Central Council of Health, Maternity and Child Welfare Associations.

He was appointed a Fellow of the College of Physicians and Surgeons, Bombay.

ACCACIO DA GAMA, D.P.H.,

Director, Public Health.

Poona, 30th September 1931.

APPENDIX I (*a*).

ANNUAL REPORT OF THE HEALTH OFFICER OF THE PORT OF BOMBAY FOR THE YEAR ENDING 31ST DECEMBER 1930.

I—Summary.

The following summary shows the inspection and disinfection work done in the Port of Bombay in connection with out-going and in-coming vessels as well as those lying in the harbour and docks during the year ending 31st December 1930.

Eight hundred and forty-five vessels of all classes with 1,81,665 crew and passengers were examined during the year.

The clothing, bedding, and other belongings of 57,677 members of crews and passengers on out-going and in-coming vessels, and of members of crews of vessels lying in the port were disinfected. Of these 48,746 were Asiatic and African members of crews, third class or deck European and Indian passengers, 8,498 were pilgrims who left the Port of Bombay for ports out of India, and 433 were members of crews and passengers who arrived by vessels on which cases of infectious diseases had occurred during the voyage or while in port. In addition to the abovementioned numbers, 9,156 coolies and a certain number of stevedores men were inspected in order to enable certain vessels to work cargo for a few hours after medical inspection and disinfection of crew and passengers.

II—Out-going Vessels.

2. In accordance with Government Notification, General Department, No. 1713, dated the 15th March 1917, the medical examination of all vessels, crews, and passengers, proceeding to ports out of India and the disinfection of the clothing and bedding of

(*a*) all Asiatic and African members of crews, numbering 31,017,

(*b*) all passengers travelling third class who were not provided with cabin accommodation, of fourth class and deck passengers, and of all Asiatic and African servants, numbering 17,406, and

(*c*) 8,498 pilgrims who sailed on such vessels

were carried out before they left the port of Bombay.

3. Six hundred and eighty-six outward bound vessels with 77,806 crew and 62,774 passengers, or a total of 1,40,580 persons exclusive of troops (who were examined by the Military Embarkation Staff,) were inspected, as against 678 vessels with 76,827 crew and 66,766 passengers or a total of 1,43,593 persons during the preceding year.

4. Six vessels having cases of chicken-pox, measles, mild influenza, acute pneumonia or scarlatina among crew or passengers arrived in this port and departed again within 12 days of their arrival, and, of these, five were through-vessels. The Bills of

Health granted to these vessels mentioned the diseases which had occurred on board as well as the measures which had been taken before their departure for the prevention of the spread of infection on board or its introduction into other ports.

III—Infectious diseases on vessels arriving, departing or in the Harbour or Docks.

5. In accordance with the rules prescribed under Government Notification, No. 1713, dated the 15th March 1917, medical inspection and disinfection of vessels which were actually infected or suspected of being infected were carried out. All pilgrim ships were also inspected on arrival.

6. One hundred and thirty-eight in-coming vessels with crews aggregating 15,948 persons and 24,704 passengers and pilgrims were inspected during the year. Of these 138 vessels, 22 (including Hired Transports) were found to have had cases of infectious disease on board at the time of arrival or during the voyage. In connection with these vessels there were 33 cases of measles, 9 of chicken-pox, 1 of jigger, 35 of influenza, 2 of Acute pneumonia, 4 of sleeping sickness, 1 of black-water fever and 1 of small-pox. The cases which occurred on Hired Transports were dealt with by the Military Authorities on landing in Bombay, and those among the crews of Transports or of other vessels by the Port Health Officer. The cases enumerated above as having occurred among Troops were removed to the Military Hospital on shore for treatment, those among European crews and passengers were removed to St. George's Hospital; and those among the Asiatic and African members of crews and passengers to the Jamsetjee Jeejeebhoy, Goculdas Tejpal, Arthur Road, or Maratha Hospitals.

7. Tabular statement No. 1 gives the number of cases of infectious diseases which occurred on vessels arriving at the port of Bombay or on those lying in the harbour or docks.

8. Tabular statement No. 2 gives separately the details of infectious diseases on vessels in the harbour or docks. The clothing and bedding of the crews of these vessels aggregating 433 persons were disinfected.

IV—Disinfection and fumigation of ships.

9. During the year under report 52 vessels were disinfected and fumigated.

10. Of the 52 vessels referred to in the foregoing paragraph, 25 vessels were fumigated by the Clayton process. Of this number 16 were out-ward bound pilgrim vessels, proceeding to Jeddah, two of which sailed from Karachi, and 9 were fumigated at the request of the owners. In addition to these vessels, the British India Steam Navigation Company fumigated 30 steamers by their own apparatus and by the Port Clayton apparatus which was occasionally lent to them at their request for the purpose.

11. The Port Disinfection Station as usual received clothing and bedding from various hospitals and Shipping Companies for disinfection. 4,643 bundles containing clothing and bedding of

this kind were disinfected, as against 7,426 bundles during the preceding year.

12. There were no deaths from mephitic gas poisoning while cleansing bilges of ships during the year. There were 552 accidents on board vessels which were lying in the harbour or docks. Of these 26 proved fatal.

V—Red Sea Pilgrim Traffic.

(a)—Outward Pilgrim Traffic.

13. In accordance with the Orders of the Government of India in force, the outward Pilgrim Traffic of the year under report began on 16th January 1930. Before the pilgrims embarked at Bombay the ships were thoroughly cleansed and freed from rats by the Clayton process.

The pilgrims were medically inspected, and their bedding and all clothing which were likely to have been exposed to infection were disinfected before they were allowed to embark.

14. During the year under report 8,498 pilgrims left for Jeddah. The names of ships, the number of pilgrims carried by them and the dates on which they left Bombay for Jeddah are given in a tabular statement as under :—

No.	Name of vessel.	Number of pilgrims sailed.	Date of departure 1930.
1	S. S. "Jehangir"	409	16th January.
2	S. S. "Arabestan"	265	3rd February.
3	S. S. "Rahmani"	113	20th February.
4	S. S. "Akbar"	761	13th March.
5	S. S. "Arabestan"	753	19th March.
6	S. S. "Khosrou"	1,514	23rd March.
7	S. S. "Sarvistan"	1,617	27th March.
8	S. S. "Rahmani"	1,132	2nd April.
9	S. S. "Jehangir"	428	7th April.
10	S. S. "Akbar"	684	15th April.
11	S. S. "Khosrou"	57	20th April.
12	S. S. "Arabestan"	267	Do.
13	S. S. "Rahmani"	223	23rd April.
14	S. S. "Rizwani"	275	30th December.
	Total ...	8,498	

15. Seven thousand three hundred and thirty-two pilgrims were vaccinated before starting by a special vaccinating staff placed at the disposal of the Police Commissioner by the Municipality. No one was inoculated for cholera during the year.

(b)—Inward Pilgrim Traffic.

16. During the year under report 5,818 pilgrims arrived from Jeddah in 14 vessels as tabulated in statement No. 3 which is appended to this report.

VI—Sanitary State of the Harbour and Foreshore.

17. The Sanitary state of the harbour and the various bunders and docks was generally good.

VII—General.

18. Major P. H. S. Smyth, I.M.S., acted as Port Health Officer from 1st to 19th January 1930 and Major C. L. Bilderbeck, M.A., M.B., D.P.H., I.M.S., was in charge of the Department for the remaining period under report.

19. The members of the Medical, Clerical and Sanitary Police Staffs performed their duties satisfactorily.

C. L. BILDERBECK,
Major, I.M.S.,
Health Officer of the Port.

Bombay Port Health Office,
New Custom House,
Dated, 27th February 1931.

TABLE No. 1.

Statement showing the summary of the shipping of Bombay Port dealt with by the Port Health Department, Bombay, during the year ending 31st December 1930.

Vessels including Country Craft.	Number of Vessels inspected.	Number of persons inspected.	Number of Asiatic and African crew and 3rd Class or deck passengers disinfected.	Number of Vessels.		Number of persons vaccinated for small-pox and inoculated for cholera.		Diseases and cases of each.										
				Disinfected.	Fumigated.	Vaccinated.	Inoculated.	Plague.	Cholera.	Small-pox.	Measles.	Chicken-pox.	Jiggar.	Influenza.	Acute Pneumonia.	Sleeping Sickness.	Cerebritis.	Mumps.	Black water fever.
Entered ...	138	40,652	323	18	...	...	...	...	...	1	33	9	1	35	2	4	...	...	...
Left ...	686	1,40,580	56,921	...	16	7,332	...	...	...	11*	3*	...	...	...	...	...	...	...	...
In harbour during the year.	21	433	433	9	9	73	...	...	...	7	2	7	...	...	...	...	3	2	...
Total ...	845	1,81,665	57,677	27	25	7,405	...	...	...	19	38	16	1	35	2	4	3	2	1
Total for 1929 ...	856	1,90,483	62,149	9	18	10,790	...	...	4	8	15	14	...	11	...	...	6	...	...

*These cases were landed at Colombo, Mombasa and Aden from 10 Vessels after their departure from Bombay.

TABLE No. 2.

Statement showing the number of steamships, square-rigged vessels and Indian crafts which became infected while lying in the Port of Bombay during the year 1930.

Months.	No. of persons who were infected with infectious diseases in Docks and Bunders.			Total number of infected vessels.	Total number of infectious diseases in the Bombay Harbour.								Number of crew disinfected.
	Plague.	Cholera.	Influenza.		Plague.	Cholera.	Small-pox.	Measles.	Chicken pox.	Scarlatina.	Mumps.	Leprosy.	
January ...	...	...	...	3	...	...	1	...	...	1	1	...	...
February ...	...	...	...	6	...	...	4	...	1	...	1	...	124
March ...	...	...	...	9	...	...	2	1	4	2	...	...	237
April ...	...	...	...	1	...	...	...	...	1	...	...	...	72
May ...	...	...	...	...	...	...	...	...	...	...	...	...	...
June ...	...	...	...	...	...	...	...	...	...	...	...	...	...
July ...	...	...	...	...	...	...	...	...	...	...	...	...	...
August ...	...	...	...	...	...	...	...	...	...	...	...	...	...
September ...	...	...	...	...	...	...	...	...	...	...	...	...	...
October ...	...	...	...	...	...	...	...	...	...	...	...	...	...
November ...	...	...	...	1	...	...	...	1	...	...	...	...	...
December ...	...	...	...	1	...	...	...	...	1	...	...	...	...
Total ...	...	...	...	21	...	...	7	2	7	3	2	...	433
Total for 1929 ...	...	4	9	16	...	4	8	5	2	4	...	...	148

TABLE No. 3.

Statement showing the number of pilgrims who arrived in Bombay from Jeddah by vessels during the year 1930.

No.	Name of Ship.	Date of arrival 1930.	Number of crew inspected.	Number of pilgrims inspected.	Number of deaths during the voyage.	Number of cases of infectious diseases on board.		Remarks.
						On arrival.	During Voyage.	
1	S. S. "Rehmani" ...	27th May ...	122	1,746	17	...	...	...
2	S. S. "Sarvistan" ...	3rd ,, ...	130	329	14	...	...	...
3	S. S. "Akbar" ...	1st June ...	111	1,491	18	...	...	...
4	S. S. "Arabostan" ...	4th ,, ...	99	308	20	...	...	...
5	S. S. "Dara" ...	11th ,, ...	113	94	14	...	...	...
6	S. S. "Shuja" ...	19th ,, ...	112	386	17	...	...	...
7	S. S. "Alavi" ...	3rd July ...	101	235	5	...	...	...
8	S. S. "Jehangir" ...	11th ,, ...	109	198	7	...	...	...
9	S. "Akbar" ...	5th August ...	88	170	3	...	...	...
10	S. S. "Alavi" ...	19th ,, ...	84	170	1	...	...	...
11	S. S. "Jehangir" ...	11th September ...	87	278	2	...	...	...
12	S. S. "Alavi" ...	8th October ...	82	190	...	...	...	...
13	S. S. "Jehangir" ...	23rd ,, ...	83	149	...	...	...	...
14	S. S. "Alavi" ...	1st December ...	82	74	...	...	...	...
		Total ...	1,403	5,818	118	...	...	...

APPENDIX I (*b*).

ANNUAL REPORT OF THE HEALTH OFFICER OF THE PORT OF KARACHI FOR THE YEAR ENDING 31ST DECEMBER 1930.

I—General Remarks.

During the year under report, no epidemics of serious nature occurred in the City of Karachi and the general health of the population in the Port area was good.

Importance of Karachi as the premier Air Port of India, is increasing day by day. In my last year's Annual Report, I had remarked that the Royal Dutch Air Mail, Far East Service Company were making a series of fortnightly trial flights from Holland to Java and *vice versa*. This year I have to state, that this Dutch Company has now established a regular fortnightly service between Holland and Java *viâ* Karachi and *vice versa*.

II—Outgoing Vessels.

Three hundred seventy-eight (378) steamers outward bound for ports beyond India, were inspected and granted Bills of Health during the year under report and out of these, 129 vessels sailed for Aden, Red Sea Ports and Europe Ports, while 249 steamers proceeded to other ports out of India including Persian Gulf Ports.

In addition to the above vessels, 10 Pilgrim Steamers from Jeddah bound for Bombay made a passing call at Karachi to disembark pilgrims booked for this Port. The Bills of Health of these ships were endorsed and pratiques were granted to them after the medical inspection of their crews and passengers.

Besides the above quoted steamers, 416 country boats bound for Aden, Muscat and mostly for Persian Gulf Ports sailed from this Port during the year under report.

In accordance with the Port Health Regulations in force, the Asiatic and African crews, deck and third class passengers of all steamers and country crafts proceeding to ports beyond India were medically inspected and their bedding, clothing and other articles disinfected at the Port Health Disinfection Station, Kiamari (Karachi), prior to their departure from this Port.

III—Incoming Vessels.

During the year under report, 78 vessels including pilgrim ships and country crafts entered the harbour under the quarantine flag. These vessels were granted pratiques after their medical inspections and the necessary precautionary measures being carried out in respect of each of them.

Out of these 78 vessels, 45 arrived *via* African Ports, 10 from Jeddah and 23 from various other ports.

Thirteen country crafts carrying in all 55 passengers and 149 crew entered the port in quarantine during the year under report.

All of these crafts were medically inspected on their arrival and pratiques granted to them, after the necessary measures being carried out, in respect of each of them.

IV—Synopsis of Medical Inspection and Disinfection performed during the year 1930.

The following tabular statement shows the number of vessels, crews and passengers inspected and disinfected during the year under report:—

	Vessels.			Crews and passengers.		
	No. of Steamers.	No. of country crafts.	Total.	Of steamers.	Of country crafts.	Total.
Incoming ...	65	13	78	21,323	204	21,527
Outgoing ...	378	416	794	64,902	4,564	69,466
Grand total ...	443	429	872	86,225	4,768	90,993

Of these 90,993 persons (crews and passengers) who were medically inspected on their arrival at, and departure from the Port of Karachi, 52,432 persons (crews and passengers) also had their clothing, bedding and other articles disinfected at the Disinfection Station, Kiamari (Karachi).

V—Grant of Bills of Health to Air Crafts at the Drigh Road Aerodrome (Air Port of Karachi).

During the year under report (63) sixty-three Air Crafts were granted Bills of Health, after medical inspection of their crews and passengers.

The table below shows the number of Air Crafts, to which Bills of Health were granted during the year under report:—

No. of Air Crafts.	Nationality.	No. of crew.	No. of passengers.	Remarks.
53 Air Liners ...	British ...	159	78	Imperial Airways.
8 Royal Dutch Air Mails.	Dutch ...	24	2	Royal Dutch Far East Service.
1 Seaplane ...	Italian ...	1	Nil	Private.
1 Air Craft ...	British ...	1	Nil	Private.
63 Total ...	.....	185	80	

VI—Miscellaneous Disinfection.

A consignment of second-hand clothing was disinfected in the "Equifex Steam Disinfectors" at the request of the owner before the same were shipped to Basrah.

VII—Plague.

No case of this disease occurred on incoming or outgoing vessels during the year under report.

VIII—Cholera.

No case of this disease occurred on incoming or outgoing vessels during the year under report.

IX—Leprosy.

No case of this disease was discovered either on incoming or outgoing vessels during the year under report.

X—Small-pox.

During the year under report, four (4) cases of small-pox occurred on the undermentioned steamers and they were removed to the Epidemic Diseases Hospital, Karachi, for treatment. (1) S.S. "Chakla" arrived here from Bombay on 27th January 1930 and reported a case of Small-pox having occurred on board during the voyage amongst the Asiatic crew. The patient was immediately landed and sent to the Epidemic Diseases Hospital, Karachi, for treatment. The infected parts of the ship were washed with disinfecting fluid. The whole crew was vaccinated against Small-pox.

(2) A case of Small-pox occurred amongst the Asiatic crew of the Karachi Port Trust Dredger "Saras" on 3rd February 1930. The patient was immediately removed to the Epidemic Diseases Hospital, Karachi, for treatment and bedding, clothing, etc., of the whole Asiatic crew were disinfected by steam at the Port Health Disinfection Station. Crew quarters were washed with disinfecting fluid and all members of the crew were vaccinated. No further cases occurred on board the Dredger after this.

(3) S.S "Gazana" arrived here from (the last port of call) Bedi Bunder (Jamnagar), on 1st March 1930. On 10th March a European member of the crew was sent to the Civil Hospital by the Company's Doctor for treatment suffering from high fever. On the 12th idem the patient while in the Civil Hospital, developed Small-pox rash, and he was transferred to the Epidemic Diseases Hospital for treatment. All the Asiatic and European members of the crew were medically inspected and their bedding, clothing, etc., were disinfected at the Port Health Disinfection Station. The cabin occupied by the patient was thoroughly washed with disinfecting fluid and the bedding, etc., used by him was disinfected by steam at the Port Health Disinfection Station. The whole crew

(European and Asiatic) was vaccinated. The ship sailed hence for Calcutta *vid* Colombo on the 20th March and no further cases occurred on board.

(4) The Commander of the S.S. "Janaki" developed Small-pox on board the ship, during her voyage between Cochin and Karachi. She arrived here on the evening of 27th March 1930. The patient was immediately removed to the Epidemic Diseases Hospital, Karachi for treatment. The cabin occupied by the Commander, was thoroughly disinfected and the bedding, etc., used by him was also disinfected by steam at the Port Health Disinfection Station. The whole crew (Europeans and Asiatics) were vaccinated and bedding, clothing, etc., of the Asiatic crew were disinfected by steam at the Port Health Disinfection Station. The vessel sailed for Cananore on 31st March 1930 and no further cases occurred on board.

XI—Chicken-pox.

Two (2) cases of Chicken-pox were detected on the below noted vessels :—

(1) S.S. "Vasna" onward bound for Basrah, arrived here from Bombay on 22nd March 1930. On 23rd March at the time of the disinfection of the Asiatic crew and deck passengers, prior to the granting of Bill of Health, a deck passenger was found to be suffering from "Chicken-pox" in fairly advanced stage. The patient was sent to the Epidemic Diseases Hospital at Karachi for treatment and necessary precautionary measures were carried out on board. The vessel sailed on the same day, and no further cases occurred on board.

(2) S.S. "Somersetshire" arrived here from the United Kingdom on 13th February 1930. The Master reported that a case of "Chicken-pox" had occurred on board during the voyage amongst the Asiatic crew, the case had occurred about three weeks ago. The patient was isolated and treated by the ship's Doctor. On inspection, the patient was found to be free from infection. The ship's Medical Officer had carried out all the precautionary measures on board, such as the disinfection of the infected parts of the ship, etc.

XII—Acute Pneumonia.

(*a*) S.S. "Varsova" arrived here from Basrah on 1st May 1930. A deck passenger from Basrah bound for Bombay, developed Pneumonia during the voyage, as the patient was seriously ill the ship's Surgeon decided to put the patient into the Civil Hospital at Karachi for treatment. The patient however expired in the Motor Ambulance on his way to Hospital.

(*b*) Pilgrim Ship "Jehangir" onward bound for Bombay, arrived here from Jeddah on 8th July 1930. One male pilgrim was

suffering from Pneumonia. As the patient was making a favourable progress in the ship's hospital, he was kept on board, and proceeded to Bombay.

XIII—Measles.

No case of Measles was detected during the year under report on any of the incoming or outgoing vessels.

XIV—Mumps.

S.S. " Dogra " arrived here on 16th November 1930 from Java. On 18th November 1930 the ship's " Medical Attendant in Port " reported three cases of Mumps amongst the Asiatic crew. The patients were removed to the Epidemic Diseases Hospital, Karachi, for treatment.

On 21st November one more case was removed to the Epidemic Diseases Hospital suffering from Mumps.

In view of these cases of Mumps occurring on board one after another, very careful disinfection of the crews' quarters, their bedding, etc., was carried out, on 21st idem, and instructions were given to the Master, to impress upon the crew to gargle their mouths two or three times a day with an antiseptic mouth wash. After these precautionary measures no further cases occurred on board, though the steamer remained in the harbour for over two months after the occurrance of these cases.

On going into the history of these cases of Mumps on board, it was revealed, that a case of Mumps had occurred on board the ship on 30th October 1930, a day after the ship left Java and the infection seems to have spread on board by this first patient.

XV—Beriberi.

S.S. " City of Yokohama " arrived here from New York *vid* Suez on 11th June 1930. Six cases of Beriberi, five of wet and one of dry type were reported amongst the Asiatic firemen.

The Master of the vessel incriminated the drinking water taken on board, at one of the intermediate ports as the cause of the disease, saying that it was contaminated with sea water. Samples of the incriminated water were taken and sent to the Chemico Bacteriological Laboratory for analysis. But the report pointed out no contamination at all with sea water.

On going into the details of the history of the disease it was revealed, that the Asiatic firemen due to some cause best known to themselves refused to take " Lime Juice " served out to them. It was further revealed that the crew received no fresh vegetables during the voyage. However the deck crew, who received similar rations, but partook of " Lime Juice " daily, had no case of Beriberi amongst them.

XVI—Heat Exhaustion.

S.S. "Taransay".—This steamer arrived here from Calcutta under the quarantine flag on 17th June 1930. Before her arrival here the Master had sent a wireless message informing that two deaths had occurred on board during the voyage.

The vessel was boarded immediately on arrival and the following facts were stated by the Master during the course of the inquiry. He stated that the steamer had left Calcutta on 1st June 1930 and one Asiatic fireman took suddenly ill on the 5th idem suffering from Diarrhœa, vomiting and cramps in the legs and died on the 6th June the next day. The second patient, also a fireman, took ill on 7th June with similar symptoms and died on the same evening.

No further cases occurred on board during the voyage from 7th to 17th June 1930.

At first sight these cases appeared to be that of "Cholera" or "Food Infection", but on going minutely into the history of the cases, both these diseases were ruled out, and the conclusion arrived at was that the deaths may have been due to "Heat Exhaustion" as on those particular days the Master reported that the heat at sea was excessive, so naturally the heat in the Engine Room down below must have been considerable. Moreover both the men were at work and fell ill a few hours after they came up from the Engine Room.

The ship left Karachi for Port Said for orders on 29th June 1930 and no further cases occurred on board. Thus confirming that the deaths could not have been due to any infectious disease.

XVII—Scarlet Fever.

H.T. "Somersetshire" arrived here on 8th October 1930 under quarantine flag from the United Kingdom. There were two cases of Scarlatina amongst the families of troops on board the ship. The patients were taken charge of by the Military Medical Authorities. Infected parts of the ship and the contaminated bedding, linen, etc., were disinfected.

XIX—Yellow Fever, Jigger, Sleeping Sickness, Cerebro Spinal Meningitis and Influenza.

None of these diseases were either reported or detected amongst crews and passengers of the incoming or outgoing vessels during the year under report.

XX—Deaths due to Non-notifiable Diseases.

Five (5) deaths due to non-notifiable diseases occurred on incoming vessels during the year under report.

XXI—Red Sea Pilgrim Traffic.

A. Outward Pilgrim Traffic.

In all nine steamers sailed from this Port for Jeddah, carrying 6,374 pilgrims during the year under report. On the day of sailing of each steamer all pilgrims prior to their embarkation were medically inspected at the Port Health Disinfection Station, Kiamari, and their bedding and clothing disinfected.

In the following table is shown the names of the steamers with their dates of sailing and the number of pilgrims carried by each :—

No.	Names of the Pilgrim Ships.	Date of Sailing.	Number of Pilgrims embarked at Karachi.
1	P.S. "Alavi"	27th December 1929 ..	399
2	„ "Jehangir"	20th January 1930 .	491
3	„ "Arabestan"	7th February 1930 ...	747
4	„ "Rahmani"	24th February 1930 ..	352
5	„ "Akbar"	17th March 1930 ...	766
6	„ "Arabestan"	22nd March 1930 ...	528
7	„ "Alavi"	27th March 1930 ...	1,061
8	„ "Dara"	12th April 1930 ...	1,259
9	„ "Khosrou"	23rd April 1930 ...	771
		Total ...	6,374

Out of the abovementioned nine steamers, only two steamers sailed direct from Karachi, while the others arrived from Bombay with pilgrims on board and after embarking additional pilgrims at this Port, sailed hence for Jeddah.

As the S.S. "Khosrou" and the S.S. "Dara" sailed direct from here, both the ships were rendered rat free by fumigation prior to the embarkation of pilgrims. Further their Medical Stores and hospital equipment were also inspected and found to comply with the standard laid down by Government.

General health of the pilgrims who sailed from here was on the whole good. Moreover the death rate amongst the pilgrims from British India as shown in the Annual Report of the Director, Kamaran Quarantine Station, for 1929-30 is only 0·1 per cent. This compares well with the death rate of 0·3 per cent. amongst the pilgrims from the Dutch East Indies.

B. Inward Pilgrim Traffic.

The first Inward Pilgrim ship arrived here from Jeddah on 28th May 1930 disembarking 1,280 pilgrims at this Port.

The following table shows the number of pilgrims who returned to Karachi from Jeddah, the names of ships by which they travelled and other particulars :—

No.	Name of Ships.	Date of arrival	No. of pilgrims embarked at Jeddah.	No. of pilgrims on board on arrival Karachi.	No. of pilgrims disembarked at Karachi.	No. of deaths during the voyage.	No. of patients in the ships' hospital on arrival.	No. of infectious diseases during the voyage or on arrival.
1	"Sarvistan" ...	28th May 1930 ...	1,623	1,609	1,280	14	1	Nil.
2	"Khosrou" ...	28th May 1930 ...	1,509	1,491	1,490	18	12	Nil.
3	"Arabestan" ...	2nd June 1930	1,373	1,278	967	17	8	Nil.
4	"Dara" ...	8th June 1930 ...	1,489	1,451	1,366	14	6	Nil.
5	"Shuja" ...	17th June 1930 ...	1,464	1,448	1,061	16	10	Nil.
6	"Alavi" ...	30th June 1930 ...	1,179	1,118	883	5	13	Nil.
7	"Jehangir" ...	8th July 1930 ...	1,249	701	503	7	4	Nil.
8	"Akbar" ...	2nd August 1930 ...	738	512	312	3	Nil.	Nil.
9	"Alavi" ...	16th August 1930...	334	329	159	1	2	Nil.
10	"Jehangir" ...	9th September 1930.	655	585	307	2	7	Nil.
		Total ...	11,613	10,522	8,358	97	63	Nil.

In all 10 Pilgrim ships arrived here and disembarked 8,358 pilgrims during the year under report.

Ninety-seven deaths due to non-notifiable diseases occurred on board the returning pilgrim ships as shown in the above table, thus giving a death rate of 0·83 per cent., amongst the returning pilgrims. This increased death rate amongst the returning pilgrims is due to the hardships undergone by them during the Pilgrimage. Most of the deaths were due to old age, inanition, digestive disturbance and ascitis.

Some of the Pilgrim ships were permitted by His Majesty's Minister at Jeddah to carry pilgrims in excess of the numbers for which they were measured. The names of these Pilgrim ships together with the excess number of pilgrims permitted to be carried is set forth below in tabular form :—

Name of Ship.	Date of arrival at Karachi.	Excess number of Pilgrims for				
		Kamaran.	Aden.	Makalla.	Karachi.	Total.
S.S. "Arabestan" ...	2nd June 1930 ...	...	...	83.	...	83
" "Dara" ...	8th June 1930 ...	...	25	...	23	48
" "Jehangir" ...	8th July 1930 ...	86	...	...	...	86
	Total ...	86	25	83	23	217

XXII—Clayton Apparatus.

Four steamers were fumigated and four were granted "Deratisation Exemption Certificates" during the year under report. Of the

steamers fumigated, one was granted Fumigation Certificate according to the standard laid down by the Netherlands Government, while the other three were granted Deratisation Certificates on the International Form recently introduced.

The following steamers were granted "Deratisation Certificates" after fumigation by Clayton Apparatus :—

S.S. "Hatipara" on 7th March 1930.
„ "Derbyshire" on 14th June 1930.
„ "Hatimura" on 23rd June 1930.
„ "Gambada" on 7th November 1930.

The following were granted "Deratisation Exemption Certificates" :—

S.S. "War Sudra" on 22nd August 1930.
„ "British Emperor" on 8th October 1930.
H.T. "Neuralia" on 9th December 1930.
S.S. "Khuzistan" on 11th December 1930.

XXIII—Number of Patients admitted from the shipping in the Harbour to the Civil Hospital, Karachi, for treatment.

In all 36 patients were admitted from ships in the harbour into the Civil Hospital, Karachi, suffering from various ailments and of these, 6 died in the hospital.

XXIV—Sanitary condition of the Harbour.

The sanitary condition of the harbour during the year under report was satisfactory.

XXV—Statement showing cases and deaths from Plague, Cholera, Small-pox and Diptheria in the City of Karachi during the year under report.

Names of diseases.	No. of cases.	No. of deaths.
Plague	.....	.....
Cholera	.....	.....
Small-pox	207	80
Diptheria	122	37

XXVI—Staff.

The whole staff worked during the year under report to my entire satisfaction.

Assistant Surgeon J. E. Howard, L.R.C.P., M.R.C.S., I.M.D., Assistant Port Health Officer, proceeded on leave out of India from 5th September 1930 and Assistant Surgeon W. W. O'Connor, I.M.D., was appointed to officiate as Assistant Port Health Officer during the absence on leave of Assistant Surgeon J. E. Howard and he took charge of his duties from 7th September 1930.

B. F. KHAMBATTA,
M.B., B.S., D.P.H.,
Health Officer of the Port, Karachi.

APPENDIX I (*c*).

ANNUAL REPORT OF THE HEALTH OFFICER OF THE PORT OF ADEN FOR THE YEAR 1930.

I—General Remarks.

One thousand six hundred and ninety vessels and rigged vessels were granted Bills of Health during the year against one thousand five hundred and eighty-three for the year 1929.

Of the above number 1,131 were sailing under the British flag and 559 under Foreign flags.

The accompanying table " A " gives a list of vessels on board of which infectious diseases existed on arrival. In the case of these vessels, all sanitary precautions were taken to prevent the spread of the disease.

The following cases of infectious diseases were landed from shipping :—

Small-pox	...	...	...	...	4
Chicken-pox	...	...	...	...	2

II—Pilgrim Traffic.

Fifteen ships carrying pilgrims passed through the Port of Aden during the year. All were medically examined but they were not granted pratique.

Year.	No. of Ships.	No. of Pilgrims.	Deaths
1930	15	5,702	...

III—Table " A ".

The following is the list of vessels on board of which cases of infectious diseases existed on arrivals at this Port during the year :—

Date.	Name of Ship.	Nationality.	From	To	Number of cases.	Remarks.
19th January 1930 .	Manela ...	British.	London ...	Calcutta ...	1 Mls. ...	Isolated O. B.
9th February 1930 .	Wooburn ...	,,	Bombay ...	Glaston ...	1 S. P....	Landed.
12th February 1930.	Mulbera ...	,,	London ...	Colombo ...	1 Mls. ...	Isolated O. B.
16th February 1930.	Margha ...	,,	Calcutta ...	London ...	1 S. P....	Landed.
20th February 1930.	Llandaff Castle ...	,,	Port Sudan .	Natal ...	1 C. P. .	Isolated O. B.
10th March 1930 ...	City of Salford ...	,,	Karachi ...	Dunkirk ...	2 S. P....	Landed.
12th March 1930 ...	Kaisar-I-Hind ...	,,	Bombay ...	London ...	1 Mls. ...	Isolated O. B.
15th March 1930 ...	Ranchi ...	,,	London ...	Bombay ...	6 Mls. ...	Do.

Date.	Name of Ship.	Nationality.	From	To	Number of cases.	Remarks.
17th March 1930 ...	Manora ...	British .	Calcutta ...	London ...	1 Pneu. 1 Mls.	Isolated O. B.
Do. ...	Andre-Lebon ...	French .	China ...	France ...	1 Mls. ...	Do.
18th March 1930 ...	Macedonia ...	British .	,, ...	London ...	1 C. P. .	Do.
21st March 1930 ...	City of Venice ...	,,	Liverpool ...	Bombay ...	4 Mls. ..	Do.
28th March 1930 ...	H. M. S. Vindictive.	,,	Suez ...	Hongkong . .	1 C. P. .	Landed to R. A. F. Hospital.
29th March 1930 ...	Morea ...	,,	London ...	Bombay ...	1 Mls. ...	Isolated O. B.
31st March 1930 ...	Akbar ...	,,	Jeddah ...	Do. ...	1 C. P. .	Do.
10th April 1930 ...	Nigaristan ...	,,	Busra ...	Glasgow ...	Do. . .	Do.
5th May 1930 ...	Gange ...	Italian...	Bombay ...	Triest .	1 Mls. ..	Do.
15th May 1930 ...	Novara ...	British .	Antwerp ...	Calcutta ...	1 C. P. .	Do.
2nd July 1930 ...	Baradine ...	,,	Sydney ...	London ..	Do. ...	Do.
8th July 1930 ...	Andre-Lebon ...	French .	China ...	France ...	1 Mls. ...	Do.
10th August 1930 ...	General-Duchesne.	,,	E. Africa ...	Do. ...	1 C. P. ...	Do.
23rd August 1930 ...	Malwa ...	British .	London ...	China ..	Do. ...	Do.
27th August 1930 ...	Balranald ...	,,	Sydney ...	London ...	5 Mls. ...	Do.
27th September 1930.	City of Hongkong.	,,	Calcutta ...	New York ...	1 Pneu...	Do.
17th October 1930 .	Port Hobart ...	,,	Sydney ...	London ...	1 C. P. ...	Do.
19th October 1930 .	Somersetshire ...	,,	Karachi ...	Do. ...	1 Pneu...	Do.
15th November 1930.	Malda ...	,,	London ...	Beira ...	3 C. P. ...	Do.
20th December 1930.	Rajputana ...	,,	Do. ...	Bombay ...	1 Mls. ...	Do.
22nd December 1930.	Mantola ...	,,	Calcutta ...	London ...	1 C. P. ...	Landed.

N.B.—S. P. stands for Small-pox; C. P. stands for Chicken-pox; Mls. stands for Measles; and Pneu. stands for Pneumonia.

IV

The following are the names and other information regarding the Pilgrim-ships which passed through Aden during the Year under report :—

Date.	Name of ship.	Nationality.	From	To	Number of		
					Pilgrims.	Infectious cases.	Death.
24th March 1930 .	Tuna ...	British .	Aden ...	Jeddah ...	79	...	...
30th March 1930 .	Elamin ...	,,	Jibouti ...	,,	106	...	...
Do. ...	Ayamonte ...	,,	Mokalla ...	,,	238	...	...
11th April 1930 ...	Africa ...	,,	Jibouti	,,	41	...	...
21st April 1930 ...	Ayamonte ...	,,	Mokalla ...	,,	136	...	...
23rd June 1930 ...	Alavi ...	,,	Jeddah ...	Bombay ...	1,119	...	...

Date.	Name of ship.	Nationality.	From	To	Number of Pilgrims.	Infectious cases.	Death.
1st July 1930 ...	Jehangir ...	British .	Jeddah ...	Bombay ...	1,148	...	...
26th July 1930 ...	Akbar ...	,,	,,	,,	745	...	...
9th August 1930 .	Alavi ...	,,	,,	,,	330	...	...
1st September 1930.	Jehangir ...	,,	,,	Karachi ...	681	...	...
30th September 1930.	Alavi ...	,,	,,	Bombay ...	192	...	...
26th October 1930.	Jehangir ...	,,	,,	,,	90	...	...
20th November 1930.	Alavi ...	,,	,,	,,	89	...	...
2nd December 1930.	Radja ...	Dutch ...	Batavia ...	Jeddah ...	630	...	...
25th December 1930.	Jehangir ...	British .	Jeddah ...	Bombay ...	78	...	...

V—Establishment.

Major C. L. Bilderbeck, M.A., M.B., D.P.H., I.M.S., Officiating Health Officer of the Port of Aden from 1st to 7th January 1930 inclusive. Lieut.-Colonel E. S. Phipson, D.S.O., M.D., M.R.C.P., D.P.H., D.T.M. & H., I.M.S., from 8th January to 31st December 1930 inclusive.

VI—Office Establishment.

Mr. E. Naser, Head Clerk to the Health Officer of the Port of Aden from 1st January to 31st December 1930 inclusive.

Ahmed Abdulla, peon, from 1st January to 31st May 1930 and Abdulla Hussain from 1st to 30th June, and peon Abdulla Salem from 1st July to 31st December 1930 inclusive.

Peon Omer Bubaker from 1st January to 30th September 1930 and peon Abdo Ahmed from 1st October to 31st December 1930 inclusive.

VII—Launch Establishment.

Driver Hasson Noman from 1st January to 30th April 1930, and stoker Abdo Noman officiated from 1st May to 31st October 1930.

Driver Hasson Noman from 1st November to 31st December 1930.

Stoker Abdo Noman from 1st January to 30th April 1930, and outsider Abdulla Sadaan from 1st May to 31st October 1930. Abdulla Sadaan was re-instated as Acting Stoker on departure of the permanent incumbent on leave from 1st November to 31st December 1930.

Succani Mohamed Abdulla from 1st January to 30th November 1930 and Succani Ismail Mohamed from 1st to 31st December 1930 inclusive.

Lascar Mohamed Elmi from 1st January to 31st December 1930.

VIII—Disinfecting Stove.

A fireman was retained for the care of the disinfecting Stove on Flint Island during the year in accordance with Government Order, General Department, No. 4607, dated 18th April 1920.

E. S. PHIPSON,
M.D. (Lond.), M.R.C.P., D.P.H.,
Lieut.-Colonel, I.M.S.,
Health Officer of the Port of Aden.

APPENDIX II.

The following table shows year of completion of drainage or water-works and a comparison of mean death-rate in the towns concerned for periods preceding and subsequent to installation.

In column 7 is given for comparison the death-rate of the adjoining rural circle for the year under report;—

District.	Town.	Date of completion of works of		Mean death-rate (a)		Death-rate in adjoining rural circle (a).	Mean death-rate from cholera *plus* dysentery and diarrhœa.		Remarks.
		Drainage.	Water supply.	For years preceding the installation.	For the years (succeeding installation) ending 1930.		For years preceding works.	For the years (following the works) ending 1930.	
1	2	3	4	5	6	7	8	9	10
Sholapur ...	Sholapur	...	1917	51·01	37·72	40·56	14·05	2·72	
Do. ...	Pandharpur.	...	1914	49·93	54·68	35·57	19·60	6·36	
Nasik ...	Nasik ...	...	1913	52·73	33·82	37·82	11·33	2·18	
Bijapur ...	Bijapur ...	...	1913	30·08	24·95	34·10	1·77	1·84	
Poona ...	Lonavla ...	...	1915	13·68	26·40	25·76	1·12	1·41	
Do. ...	Poona City*.	1916	...	36·47	42·09	16·72	10·18	2·66	* Chlorination of water-supply began in 1915.
Satara ...	Karad ...	...	1916	18·58	19·27	33·42	7·10	1·15	
Sholapur ...	Barsi ...	...	1917	44·41	40·44	33·96	5·83	3·14	
Nasik ...	Trimbak ...	...	1921	43·88	21·25	37·82	2·35	·80	
Poona ...	Poona Cantonment.†	...	1916	23·49	11·71	16·72	2·07	0·97	† Change in type of installation.
Sukkur ...	Sukkur ...	...	1924	21·46	23·28	32·50	·45	0·78	

(a) Exclusive of Plague and Influenza.

APPENDIX

ANNUAL FORM NO. I.—*Showing the* BIRTHS *registered in the*

1	2	3			4		
Number.	Districts.	POPULATION ACCORDING TO CENSUS OF 1921.			NUMBER OF BIRTHS REGISTERED.		
		Male.	Female.	Total.	Male.	Female.	Total.
	Western Registration District.						
1	East Khándesh	545,376	529,746	1,075,122	27,649	25,624	53,273
2	West Khándesh	309,511	303,201	612,712	17,354	16,327	33,681
3	Násik	418,510	406,706	825,216	21,676	19,918	41,594
4	Thána	388,310	368,589	756,899	13,225	12,392	25,617
5	Bombay Suburban ...	87,567	63,874	151,441	1,793	1,657	3,450
6	Kolába	279,350	293,122	562,472	11,670	11,205	22,875
7	Bombay City	751,948	396,867	1,148,815	12,850	12,196	25,046
	Central Registration District.						
8	Ahmednagar	362,947	361,031	723,978	19,659	18,745	38,404
9	Poona	500,601	487,080	987,681	20,235	18,781	38,966
10	Sholápur	383,167	360,002	743,169	17,882	16,691	34,576
11	Sátára	510,445	513,711	1,024,890	21,713	20,713	42,425
12	Ratnágiri	525,085	628,895	1,153,156	20,500	19,149	39,649
	Southern Registration District.						
13	Belgaum	484,615	465,047	949,662	20,397	19,898	40,295
14	Dhárwár	528,348	507,861	1,036,209	21,396	20,957	42,353
15	Bijápur	405,148	391,208	796,356	17,081	16,441	33,522
16	Kánara	203,950	197,526	401,476	7,626	7,462	15,088
	Gujarát Registration District.						
17	Surat	337,276	336,845	674,121	13,041	12,154	25,195
18	Broach	158,568	149,143	307,711	7,500	6,917	14,417
19	Kaira	379,702	331,203	710,905	13,867	12,134	26,001
20	Panch Mahals	193,385	181,446	374,831	8,090	7,485	15,575
21	Ahmedabad	473,693	414,231	887,924	18,627	17,057	35,684
	Sind Registration District.						
22	Karáchi	302,563	228,094	530,657	8,307	7,549	15,856
23	Hyderabad	316,834	250,415	567,249	5,808	4,405	10,213
24	Thar and Párkar	221,074	175,233	396,307	5,433	4,505	9,938
25	Nawabshah	233,826	184,826	418,652	5,369	3,993	9,362
26	Lárkána	331,204	266,733	597,937	6,017	4,695	10,712
27	Sukkur	281,493	227,869	509,362	4,977	3,969	8,946
28	Upper Sind Frontier ...	134,321	106,293	240,614	2,463	1,776	4,239
	Total for the Presidency ...	10,048,817	9,116,797	19,165,614	372,205	344,747	716,952

III.

DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1930.*

5			6	7	8	9		
RATIO OF BIRTHS PER 1,000 OF POPULATION.			Number of males born to every 100 females born.	Excess of Births over Deaths per 1,000 of Population.	Excess of Deaths over Births per 1,000 of Population.	MEAN RATIO OF BIRTHS PER 1,000 DURING PREVIOUS FIVE YEARS.		
Male.	Female.	Total.				Male.	Female.	Total.
25·72	23·83	49·55	107·90	8·82	.....	25·26	23·68	48·94
28·32	26·65	54·97	105·29	13·00	.....	26·34	25·17	51·51
26·26	24·14	50·40	108·63	15·32	.....	24·48	22·98	47·86
17·48	16·37	33·85	106·72	8·08	.....	17·51	16·22	33·73
11·84	10·90	22·74	108·21	3·62	.....	10·80	9·88	19·68
20·75	19·92	40·67	104·15	9·97	.....	20·95	19·97	40·92
11·18	10·62	21·80	105·36	.....	1·99	9·77	9·29	19·06
27·15	25·89	53·04	104·88	18·01	.....	26·34	24·14	50·48
20·49	18·97	39·46	108·02	7·10	.....	18·79	17·27	36·06
24·06	22·46	46·52	107·12	6·62	.....	23·20	21·84	45·04
21·20	20·22	41·42	104·83	6·34	.....	21·66	20·53	42·19
17·76	16·59	34·35	107·05	9·46	.....	18·94	17·95	36·89
21·48	20·95	42·43	102·51	13·11	.....	21·14	20·24	41·38
20·65	20·22	40·87	102·09	13·14	.....	19·28	18·47	37·75
21·45	20·65	42·09	103·89	9·72	.....	20·85	20·10	40·96
18·99	18·59	37·58	102·20	10·27	.....	17·54	16·58	34·12
19·34	18·03	37·37	107·30	6·32	.....	20·05	19·85	40·80
24·37	22·48	46·85	108·48	6·59	.....	23·95	22·63	46·58
19·50	17·07	36·57	114·28	5·18	.....	19·99	17·97	37·96
21·58	19·97	41·55	108·18	10·69	.....	21·41	20·23	41·64
20·98	19·21	40·19	109·20	6·84	.....	20·16	18·59	38·75
15·66	14·22	29·88	110·04	10·64	.....	15·15	13·24	28·43
10·28	7·76	18·01	131·85	3·96	.....	9·71	7·75	17·46
13·71	11·37	25·08	120·59	10·93	.....	13·51	10·77	24·28
12·82	9·54	22·36	134·41	6·93	.....	13·92	10·24	24·16
10·06	7·85	17·91	128·15	.....	1·14	12·17	9·27	21·44
9·77	7·79	17·56	125·22	.....	6·05	14·66	11·49	26·16
10·23	7·38	17·62	138·68	.....	2·54	13·11	9·79	22·91
19·42	17·99	37·41	107·96	7·88	.....	19·23	17·77	37·00

ANNUAL FORM NO. II.—*Showing the* BIRTHS *and* DEATHS *during the*

1	2	3	4	5	
Number.	Districts.	Area in square miles.	Average population per square mile.	POPULATION (CENSUS, Male.	Female.
	Western Registration District.				
1	East Khandesh	4,551	236	545,376	529,746
2	West Khandesh	5,438	113	309,511	303,201
3	Nasik	5,877	140	418,510	406,706
4	Thana	3,434	220	388,310	368,589
5	Bombay Suburban	142	1,066	87,567	63,874
6	Kolaba	2,169	259	279,350	283,129
7	Bombay City	24	47,867	751,948	396,817
	Central Registration District.				
8	Ahmednagar	6,610	109	362,947	361,031
9	Poona	5,354	184	500,601	487,080
10	Sholapur	4,556	163	383,167	360,002
11	Satara	4,910	209	510,445	513,711
12	Ratnagiri	3,989	289	525,085	628,895
	Southern Registration District.				
13	Belgaum	4,611	206	484,615	465,047
14	Dharwar	4,606	226	523,348	507,861
15	Bijapur	5,707	139	405,148	391,208
16	Kanara	3,946	102	203,950	197,526
	Gujarat Registration District.				
17	Surat	1,651	408	337,376	336,845
18	Broach	1,468	210	158,568	149,143
19	Kaira	1,596	445	379,702	381,203
20	Panch Mahals	1,606	233	193,385	181,446
21	Ahmedabad...	3,824	232	473,693	414,231
	Sind Registration District.				
22	Karachi	11,231	47	302,563	228,094
23	Hyderabad	4,417	128	316,884	250,415
24	Thar and Parkar	13,636	29	221,074	175,233
25	Nawabshah	3,889	107	233,826	184,826
26	Larkana	5,057	118	331,204	266,738
27	Sukkur	5,612	91	281,498	227,569
28	Upper Sind Frontier	3,664	90	134,321	106,293
	Total for the Presidency ...	122,578	126	10,048,817	9,116,797

registered in the DISTRICTS *of the* BOMBAY PRESIDENCY *year 1930.*

	6		7			8
1921).	BIRTHS.		NUMBER OF DEATHS REGISTERED.			Number of Deaths of males to every 100 deaths of females.
Total.	Total Number.	Birth-rate per 1,000 of population.	Male.	Female.	Total.	
1,075,122	53,273	49·55	22,095	21,694	43,789	101·85
612,712	33,681	54·97	12,630	12,896	25,726	99·01
825,216	41,594	50·40	14,810	14,144	28,954	104·71
756,899	25,617	33·85	9,978	9,524	19,502	104·77
151,441	3,450	22·74	1,551	1,351	2,902	104·80
562,472	22,875	40·67	8,711	8,557	17,268	101·80
1,148,815	25,046	21·80	14,881	12,454	27,335	119·49
723,978	38,404	53·04	13,321	12,037	25,358	110·67
937,681	38,966	39·46	16,478	15,492	31,970	106·36
743,169	34,576	46·52	15,238	14,411	29,649	105·74
1,024,156	42,425	41·42	18,322	17,606	35,928	104·07
1,153,980	39,649	34·35	13,865	14,856	28,721	93·34
949,552	40,295	42·43	13,883	13,962	27,845	99·43
1,036,209	42,353	40·87	14,174	14,564	28,738	97·32
796,356	33,528	42·09	12,991	12,787	25,778	101·60
491,476	15,088	37·58	5,562	5,404	10,966	102·92
674,121	25,195	37·37	10,602	10,330	20,932	102·63
307,711	14,417	46·85	6,244	6,145	12,389	121·36
719,905	26,001	36·57	11,887	10,430	22,317	113·97
374,831	15,575	41·55	5,823	5,746	11,569	101·34
887,924	35,684	40·19	15,307	14,309	29,616	106·97
530,657	15,856	29·88	5,630	4,529	10,209	125·41
567,249	10,213	18·01	4,453	3,514	7,967	126·72
396,307	9,938	25·08	3,305	2,524	5,829	130·94
418,652	9,362	22·36	3,674	2,787	6,461	131·82
597,937	10,712	17·91	6,436	4,957	11,393	129·83
509,362	8,946	17·56	6,755	5,288	12,043	127·74
240,614	4,239	17·62	2,663	2,186	4,849	121·82
19,165,614	716,952	37·41	291,619	274,484	566,003	106·21

ANNUAL FORM

1	2	DEATHS PER 1,000 OF				
Number.	Districts.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.
	Western Registration District.					
1	East Khandesh	1·48	5·23	...	18·58	1·55
2	West Khandesh	1·52	4·08	...	17·60	1·12
3	Nasik	1·56	·91	·04	14·16	1·47
4	Thana	·08	·77	·22	9·54	1·22
5	Bombay Suburban	.....	·23	·07	3·45	2·74
6	Kolaba	·25	·80	...	10·92	2·66
7	Bombay City	·03	1·45	·03	2·03	1·26
	Central Registration District.					
8	Ahmednagar	1·30	·51	·02	7·87	1·93
9	Poona	1·42	1·40	·12	12·07	1·97
10	Sholapur	3·36	·40	·26	14·73	2·78
11	Satara	3·71	·48	·46	12·61	2·39
12	Ratnagiri	·05	·32	·18	8·35	·90
	Southern Registration District.					
13	Belgaum	·62	·40	1·28	7·18	3·15
14	Dharwar	·14	·30	1·96	8·44	1·03
15	Bijapur	1·72	·49	·46	12·36	1·94
16	Kanara	.....	·85	·85	9·39	1·84
	Gujarat Registration District.					
17	Surat	·02	1·95	·07	10·17	·88
18	Broach	.....	3·00	...	20·07	·97
19	Kaira	·05	1·20	...	12·01	1·01
20	Panch Mahals	·64	1·07	...	18·72	·64
21	Ahmedabad	.....	1·80	...	15·04	·83
	Sind Registration District.					
22	Karachi	.....	·22	...	6·66	·94
23	Hyderabad	.....	·37	...	8·54	·15
24	Thar and Parkar	.....	·18	...	10·19	·05
25	Nawabshah	.....	·15	...	13·06	·06
26	Larkana	.....	·07	...	16·97	·09
27	Sukkur	.....	·02	...	19·33	·27
28	Upper Sind Frontier	.....	·00	...	18·91	·09
	Total for the Presidency ...	·79	1·11	·26	11·65	1·39

No. II—*contd.*

9						10		
POPULATION FROM						MEAN RATIO OF DEATHS PER 1,000 DURENG PREVIOUS FIVE YEARS.		
Respiratory Diseases.	Injuries.	All other causes.	All Causes. Male.	Female.	Total.	Male.	Female.	Total.
4·77	·23	8·89	40·51	40·95	40·73	32·79	32·43	32·61
5·40	·33	11·98	41·45	42·53	41·99	29·82	29·64	29·73
7·16	·36	9·43	35·39	34·78	35·09	31·67	30·97	31·30
6·41	·55	6·98	25·70	25·84	25·77	23·73	23·28	22·51
5·16	·57	6·94	17·71	21·15	19·16	16·75	20·01	18·06
7·00	·40	8·67	31·18	30·22	30·70	26·80	25·81	26·06
9·67	·60	8·73	19·79	31·38	23·79	21·05	32·80	25·09
6·74	·32	16·34	36·70	33·34	35·03	32·25	29·99	31·09
5·90	·34	9·14	32·72	31·80	32·36	28·46	27·07	27·77
4·18	·57	13·62	39·77	40·03	39·90	32·77	33·21	32·97
3·45	·53	11·46	35·89	34·27	35·08	31·69	31·40	31·54
3·61	·39	11 09	26·41	23·62	24·89	25·36	21·38	23·14
3·92	·54	12·22	28·65	30·02	29·32	28·88	33·33	29·17
3·67	·44	11·77	26·83	28·68	27·73	30·52	31·35	30·93
3·75	·41	11·23	32·06	32·68	32·36	27·92	27·89	27·90
2·09	·50	12·79	27·27	27·36	27·31	30 70	30·64	30·67
10·61	·33	7·07	31·43	30·67	31·05	29·43	28·69	29·07
7·56	·35	8·31	39·38	34·42	40·26	33·55	34·25	33·18
9·51	·40	7·21	31·31	31·49	31·39	28·53	30·50	29·44
3·51	·33	5·05	30·11	31·67	30·86	23·41	23·73	23·56
7·89	·40	7·40	32·31	34·54	33·35	31·22	32·84	31·89
5·56	·33	5·52	18·77	19·41	19·23	20·42	22·69	21·31
2·68	·25	2·04	14·05	14·03	14·04	16·11	15·73	15·94
2·44	·32	1·53	14·94	14·40	14·71	19·14	19·12	19·13
1·29	·27	·63	15·71	15·08	15·42	17·15	17·33	17·25
·60	·26	1·07	19·73	18·58	19·07	20·18	20·82	20·42
1·56	·26	2·18	23·99	23·26	23·64	20·60	23·42	21·58
·49	·38	·38	19·82	20·57	20·15	15·27	17·03	16·15
5·20	·40	8·73	29·01	30·11	29·53	26·74	27·59	27·15

ANNUAL FORM NO. III.—DEATHS *registered in the* DISTRICTS

1	2	3				
Number.	Districts.	January.	February.	March.	April.	May.
	Western Registration District.					
1	East Khándesh	4,151	6,088	5,976	3,978	3,120
2	West Khándesh	2,078	2,631	3,740	2,604	1,771
3	Násik	2,338	2,413	2,918	2,693	2,017
4	Thána	1,892	1,894	2,286	2,034	1,440
5	Bombay Suburban	247	265	256	270	194
6	Kolaba	1,537	1,454	1,748	1,828	1,357
7	Bombay City	2,321	2,513	2,968	2,576	2,335
	Central Registration District.					
8	Ahmednagar	1,720	1,683	2,106	2,351	2,084
9	Poona	2,781	2,538	2,857	2,781	2,550
10	Sholápur	2,221	1,844	1,982	2,455	2,297
11	Sátára	2,519	2,121	2,732	3,232	2,638
12	Ratnágiri	2,768	2,612	2,953	3,508	2,203
	Southern Registration District.					
13	Belgaum	2,432	2,097	2,419	2,762	2,288
14	Dhárwár	3,104	2,676	2,988	2,722	2,128
15	Bijápur	2,418	2,131	2,189	2,061	1,880
16	Kánara	1,174	1,128	1,028	987	822
	Gujarát Registration District.					
17	Surat	2,195	2,650	3,179	2,447	1,596
18	Broach	1,011	1,282	1,634	1,903	1,207
19	Kaira	1,997	2,185	3,387	2,950	1,738
20	Panch Mahals	1,027	1,104	1,363	1,378	927
21	Ahmedabad	3,490	3,446	3,598	2,884	2,084
	Sind Registration District.					
22	Karáchi	1,552	1,247	950	771	638
23	Hyderabad	1,155	1,014	954	652	543
24	Thar and Párkar	1,031	704	637	514	517
25	Nawabshah	1,388	917	725	533	392
26	Lárkána	2 150	1,398	1,244	957	768
27	Sukkur	2,348	1,483	1,167	785	747
28	Upper Sind Frontier	1,508	685	386	270	248
	Total for the Presidency ...	56,553	54,153	60,370	54,886	42,529
	Ratio of deaths per 1,000 in each month	2·95	2·83	3·15	2·86	2·22

of the BOMBAY PRESIDENCY *during each month of the year 1930.*

June.	July.	August.	September.	October.	November.	December.	4 Total Deaths registered during the year.	5 Number.
1,782	2,304	3,826	4,116	3,188	2,866	2,494	43,789	1
1,147	1,367	2,177	2,237	2,012	2,048	1,914	25,726	2
1,736	1,968	2,555	2,767	2,496	2,703	2,350	28,954	3
1,205	1,210	1,531	1,286	1,395	1,621	1,708	19,502	4
195	247	313	240	221	227	227	2,902	5
1,064	1,313	1,481	1,464	1,263	1,345	1,414	17,268	6
2,212	2,282	2,341	2,041	2,105	1,739	1,902	27,335	7
1,696	2,269	2,699	2,735	2,187	2,094	1,744	25,358	8
2,191	2,489	3,064	2,882	2,910	2,675	2,252	31,970	9
1,646	2,327	3,561	3,875	2,973	2,578	1,895	29,649	10
2,329	2,671	3,325	4,375	4,268	3,185	2,543	35,928	11
1,998	2,019	2,237	2,156	2,048	2,270	2,049	28,721	12
2,229	2,171	2,216	2,338	2,360	2,487	2,046	27,845	13
1,834	2,029	2,098	2,210	2,293	2,384	2,272	28,738	14
1,690	1,959	1,893	2,308	2,658	2,701	1,890	25,778	15
807	857	850	755	832	794	932	10,966	16
1,152	1,203	1,272	1,171	1,239	1,346	1,492	20,932	17
760	779	852	785	750	757	719	12,389	18
1,224	1,392	1,593	1,645	1,594	1,351	1,261	22,317	19
699	741	1,110	957	843	736	694	11,569	20
1,535	1,670	2,333	2,234	2,116	2,101	2,125	29,616	21
638	642	726	760	757	756	772	10,209	22
428	471	381	432	575	683	679	7,967	23
356	337	247	298	367	441	340	5,829	24
310	290	320	308	429	407	442	6,461	25
498	380	614	596	836	1,081	871	11,393	26
709	477	581	643	959	1,110	1,034	12,043	27
201	197	172	191	317	552	318	4,849	28
34,161	38,001	46,367	47,805	45,971	44,828	40,379	566,003	
1·73	1·93	2·42	2·49	2·40	2·39	2·11	29·53	

ANNUAL FORM No. IV.—DEATHS *registered according to* AGE *in*

1	2	3	
		Under 1 year.	
No.	Districts.	Male.	Female.
	Western Registration District.		
1	East Khándesh	6,901	5,864
2	West Khándesh	3,648	3,253
3	Násik	4,352	3,542
4	Thána	2,018	1,799
5	Bombay Suburban	348	288
6	Kolába	2,059	1,746
7	Bombay City	4,037	3,435
	Central Registration District.		
8	Ahmednagar	4,067	3,168
9	Poona	4,379	3,657
10	Sholápur	4,153	3,338
11	Sátára	4,259	3,503
12	Ratnágiri	2,065	1,780
	Southern Registration District.		
13	Belgaum	3,295	2,711
14	Dhárwár	3,363	2,817
15	Bijápur	3,021	2,556
16	Kánara	1,436	1,211
	Gujarat Registration District.		
17	Surat	2,816	2,593
18	Broach	1,808	1,682
19	Kaira	2,860	2,583
20	Panch Mahals	1,347	1,286
21	Ahmedabad	4,602	4,176
	Sind Registration District.		
22	Karachi	1,487	1,212
23	Hyderabad	836	707
24	Thar and Parkar	531	440
25	Nawabshah	487	402
26	Lárkana	860	712
27	Sukkur	1,118	903
28	Upper Sind Frontier	345	314
	Total for the Presidency ...	72,497	61,673
	Population according to Census of 1921 ...	287,146	282,999
	Ratios per 1,000 living ...	252·47	217·93

the DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1930.*

4		5		6		7	
1 year and under 5.		5 and under 10.		10 and under 15.		15 and under 20.	
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
6,410	6,694	1,487	1,436	563	575	369	576
3,607	3,855	1,031	952	388	405	262	376
3,120	3,368	806	771	398	391	238	484
1,698	1,722	564	590	320	256	257	276
292	238	61	69	34	37	38	49
1,744	1,795	467	502	319	162	163	202
2,454	2,618	394	448	213	277	403	525
2,890	2,671	520	555	308	320	230	361
3,915	3,546	647	658	389	405	427	721
3,665	3,667	864	916	403	381	300	494
3,883	3,904	992	1,008	562	577	428	583
2,067	2,149	618	736	346	350	362	403
2,963	3,253	793	892	456	491	313	452
2,929	2,970	843	917	508	614	371	572
2,938	3,158	859	810	351	351	264	369
533	545	187	192	132	152	157	254
2,250	2,227	501	561	221	254	203	266
1,886	1,826	386	404	121	134	108	123
2,950	2,610	574	468	261	262	226	265
1,326	1,341	366	363	176	169	155	144
3,183	3,278	568	620	325	329	337	413
819	758	199	197	149	139	172	200
551	512	209	164	145	134	182	170
334	270	139	125	169	105	118	109
609	502	220	180	111	87	110	78
817	756	405	207	193	140	211	173
1,110	1,025	364	289	177	119	200	168
565	537	180	153	85	54	89	67
61,566	61,775	15,231	15,268	7,728	7,671	6,807	8,873
885,160	924,937	1,468,775	1,379,851	1,224,010	969,652	751,226	650,813
69·55	66·79	10·37	11·08	6·31	7·91	9·06	13·63

ANNUAL FORM

1	2	8	
		20 and under 30.	
No.	Districts.	Male.	Female.
	Western Registration District.		
1	East Khándesh	746	1,224
2	West Khándesh	553	815
3	Násik	694	1,054
4	Thána	614	1,081
5	Bombay Suburban	110	141
6	Kolába	424	665
7	Bombay City	1,553	1,412
	Central Registration District.		
8	Ahmednagar	576	741
9	Poona	1,104	1,380
10	Sholápur	766	1,059
11	Sátára	965	1,366
12	Ratnágiri	891	1,225
	Southern Registration District.		
13	Belgaum	789	1,080
14	Dhárwár	833	1,415
15	Bijápur	646	1,015
16	Kánara	479	674
	Gujarat Registration District.		
17	Surat	602	871
18	Broach	286	380
19	Kaira	662	730
20	Panch Mahàls	303	484
21	Ahmedabad	1,011	1,104
	Sind Registration District.		
22	Karáchi	520	546
23	Hyderabad	420	448
24	Thar and Párkar	337	337
25	Nawábsháh	317	379
26	Lárkána	594	636
27	Sukkur	495	559
28	Upper Sind Frontier	193	221
	Total for the Presidency ...	17,433	22,992
	Population according to Census of 1921 ...	1,781,925	1,656,476
	Ratios per 1,000 living ...	9·78	13·88

No. IV—*contd.*

9		10		11		12		13
30 and under 40.		40 and under 50.		50 and under 60.		60 and upwards.		
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	No.
846	1,037	1,007	765	1,041	775	2,725	2,748	1
625	688	668	523	692	473	1,366	1,525	2
939	957	925	715	1,040	718	2,238	2,204	3
989	1,027	1,114	707	941	644	1,463	1,472	4
148	154	159	77	102	80	259	218	5
659	702	672	543	830	602	1,444	1,638	6
1,760	1,003	1,327	632	1,092	556	1,648	1,549	7
717	718	728	573	682	610	2,394	2,330	8
1,176	1,016	1,175	863	1,270	1,087	1,996	2,159	9
841	875	870	642	816	651	2,556	2,388	10
1,154	1,154	1,204	894	1,301	1,030	3,574	3,592	11
1,019	1,318	1,145	1,068	1,363	1,293	3,969	4,534	12
855	949	966	723	930	744	2,523	2,667	13
1,066	1,168	1,043	829	1,005	817	2,103	2,445	14
865	835	861	634	884	685	2,304	2,374	15
621	560	652	410	526	337	939	1,019	16
709	785	772	602	813	550	1,715	1,621	17
238	319	309	256	356	270	766	751	18
789	739	841	663	976	639	1,700	1,471	19
387	396	423	361	456	323	884	879	20
1,066	956	1,227	817	1,159	809	1,629	1,807	21
594	445	562	280	445	220	703	522	22
567	477	530	295	406	193	607	414	23
461	340	397	245	342	197	477	356	24
440	372	410	257	378	186	592	344	25
805	673	768	453	644	340	1,139	778	26
653	557	717	408	676	347	1,245	913	27
278	233	273	196	284	131	425	280	28
31,308	30,448	31,745	16,430	21,630	15,356	45,574	44,998	
1,642,370	1,349,143	1,025,092	901,959	615,661	555,306	457,220	480,976	
12·97	15·17	21·20	17·13	35·13	27·63	99·69	93·67	

ANNUAL FORM NO. IV (*a*).—*Showing the details of* DEATHS *during the*

No.	Districts.	Deaths						
		Not exceeding one month.						
		Male.			Female.			Total of columns 5 and 8.
		Under one week.	Over one week.	Total.	Under one week.	Over one week.	Total.	
1	2	3	4	5	6	7	8	9
	Western Registration District.							
1	East Khándesh	1,238	929	2,167	950	818	1,763	3,930
2	West Khándesh	623	567	1,190	536	452	988	2,178
3	Násik	1,030	813	1,843	733	687	1,870	3,213
4	Thána	546	373	919	441	318	759	1,678
5	Bombay Suburban	102	53	155	89	29	118	273
6	Kolába	671	385	1,056	519	311	830	1,886
7	Bombay City	926	507	1,433	642	463	1,105	2,538
	Central Registration District.							
8	Ahmednagar	886	561	1,447	722	443	1,165	2,613
9	Poona	815	720	1,535	694	600	1,294	2,829
10	Sholápur	927	616	1,543	659	516	1,175	2,718
11	Sátára	893	541	1,434	675	520	1,195	2,629
12.	Ratnágiri	486	409	895	390	303	693	1,588
	Southern Registration District.							
13	Belgaum	764	708	1,472	612	561	1,173	2,645
14	Dhárwár	671	704	1,375	565	575	1,140	2,515
15	Bijápur	630	624	1,254	484	483	967	2,221
16	Kánara	562	373	935	462	297	759	1,694
	Gujarát Registration District.							
17	Surat	588	456	1,044	496	432	928	1,972
18	Broach	335	289	624	299	243	542	1,166
19	Kaira	351	400	751	366	348	714	1,465
20	Panch Maháls	211	237	448	193	200	393	836
21	Ahmedabad	738	593	1,332	539	505	1,044	2,376
	Sind Registration District.							
22	Karachi	314	250	564	251	193	444	1,038
23	Hyderabad	221	172	393	165	123	280	673
24	Thar and Párkar	190	83	273	162	67	229	502
25	Nawabshah	115	115	230	126	85	211	441
26	Lárkána	200	186	386	159	142	301	687
27	Sukkur	210	199	409	172	146	318	727
28	Upper Sind Frontier ...	81	70	151	79	46	125	276
	Total for the Presidency ...	15,349	11,934	27,283	12,170	9,853	22,023	49,306

under one year IN THE DISTRICTS *of the* BOMBAY PRESIDENCY *year 1930.*

UNDER ONE YEAR.

Over one month and not exceeding six months.			Over six months and not exceeding twelve months.			Total, Male, columns 5, 10 and 13.	Total, Female, columns 8, 11 and 14.	Total.	No.
Male.	Female.	Total.	Male.	Female.	Total.				
10	11	12	13	14	15	16	17	18	19
2,838	2,376	5,214	1,896	1,725	3,621	6,901	5,864	12,765	1
1,477	1,332	2,809	981	933	1,914	3,648	3,253	6,901	2
1,481	1,271	2,752	1,028	901	1,929	4,352	3,542	7,894	3
766	698	1,464	333	342	675	2,018	1,799	3,817	4
105	92	197	88	78	166	348	288	636	5
637	553	1,190	366	363	729	2,059	1,746	3,805	6
1,929	953	2,182	1,375	1,377	2,752	4,037	3,435	7,472	7
1,646	1,250	2,896	974	748	1,722	4,067	3,163	7,230	8
1,594	1,490	3,194	1,140	873	2,013	4,379	3,657	8,036	9
1,630	1,389	3,019	979	774	1,753	4,152	3,338	7,490	10
1,817	1,535	3,352	1,008	773	1,781	4,259	3,503	7,762	11
717	689	1,406	453	398	851	2,065	1,780	3,845	12
1,201	1,013	2,214	622	525	1,147	3,295	2,711	6,006	13
1,162	992	2,154	826	685	1,511	3,363	2,817	6,180	14
1,153	974	2,127	614	615	1,229	3,021	2,556	5,577	15
338	332	670	163	120	283	1,436	1,211	2,647	16
1,066	958	2,024	706	707	1,413	2,816	2,593	5,409	17
718	656	1,374	466	484	950	1,808	1,682	3,490	18
1,217	1,113	2,330	893	755	1,648	2,860	2,583	5,443	19
622	597	1,219	282	296	578	1,347	1,286	2,633	20
1,694	1,464	3,158	1,576	1,668	3,244	4,602	4,176	8,778	21
486	395	881	407	373	780	1,487	1,212	2,699	22
269	219	488	174	208	382	836	707	1,543	23
179	143	322	79	68	147	531	440	971	24
170	123	293	87	68	155	487	402	889	25
318	264	577	161	147	308	860	712	1,572	26
338	282	620	371	303	674	1,118	903	2,021	27
120	121	241	74	68	142	345	314	659	28
27,093	23,274	50,367	18,121	16,376	34,497	72,497	61,673	134,170	

ANNUAL FORM No. V.—DEATHS *registered according* PRESIDENCY *during*

1	2	POPULATION			
No.	Districts.	Muhammadans.		Hindus.	
		Male.	Female.	Male.	Female.
	Western Registration District.				
1	East Khandesh	55,176	52,388	484,070	472,143
2	West Khandesh	16,011	15,846	262,850	256,881
3	Nasik	23,806	21,948	388,491	379,357
4	Thana	17,411	14,481	354,764	338,290
5	Bombay Suburban	8,728	5,625	65,684	46,744
6	Kolaba	14,012	14,342	263,562	256,748
7	Bombay City	126,177	57,210	548,171	289,378
	Central Registration District.				
8	Ahmednagar	18,966	17,870	327,801	325,681
9	Poona	23,591	19,913	466,217	454,887
10	Sholapur	30,467	28,235	346,656	326,392
11	Satara	18,337	17,652	483,403	468,459
12	Ratnagiri	34,410	46,581	486,985	578,184
	Southern Registration District.				
13	Belgaum	40,875	38,943	418,962	408,209
14	Dharwar	73,484	69,553	446,006	430,468
15	Bijapur	48,940	47,185	354,458	342,191
16	Kanara	12,580	13,822	182,587	175,191
	Gujarat Registration District.				
17	Surat	28,071	28,179	279,833	280,147
18	Broach	36,065	33,903	117,003	110,917
19	Kaira	34,193	31,022	328,634	284,525
20	Panch Mahals	13,888	12,797	171,905	161,201
21	Ahmedabad	53,637	45,433	399,443	348,852
	Sind Registration District.				
22	Karachi	213,208	168,986	82,381	58,744
23	Hydorabad	231,341	178,455	87,318	71,811
24	Thar and Parkar	118,596	94,139	98,214	77,812
25	Nawabshah	181,280	130,855	52,448	44,000
26	Larkana	277,501	222,052	53,024	44,180
27	Sukkur	200,273	158,123	79,859	68,329
28	Upper Sind Frontier	120,494	95,783	13,561	10,294
	Total for the Presidency ...	2,071,538	1,689,766	7,687,589	7,130,018

N.B.—This and all the other Statements refer to Indians only and not to Europeans. "Hindus."

Note.—Population by classes in Form V includes Jail figures.

to CLASSES *and* SEX *in the Districts of the* BOMBAY
the year 1930.

3

ACCORDING TO THE CENSUS OF 1921.

Jains.		Christians.		Parsis.		Other Classes.		Total.		Total.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
4,708	3,992	625	518	261	178	536	582	545,376	529,746	1,075,122
2,255	1,832	543	445	120	70	28,244	28,649	309,511	303,201	612,712
4,076	3,445	1,577	1,524	509	400	51	32	418,516	406,706	825,216
1,524	744	13,339	13,112	1,532	1,907	159	150	388,310	368,589	756,899
1,354	632	10,471	9,608	1,246	1,199	84	66	87,567	63,874	151,441
1,153	487	622	482	177	139	837	925	279,350	283,122	562,472
17,587	6,297	32,198	16,096	27,948	24,286	5,505	3,718	751,948	396,867	1,148,815
6,667	6,171	10,967	13,185	90	90	62	34	364,753	361,031	725,784
6,706	4,984	5,109	5,448	1,557	1,510	454	448	500,601	487,080	987,681
4,015	3,413	1,067	1,055	170	161	...	...	382,374	359,266	741,630
8,104	7,197	1,102	886	261	237	31	26	511,238	514,457	1,025,695
819	821	3,078	3,339	22	14	16	11	525,085	628,895	1,153,980
21,883	19,987	2,963	2,840	59	62	22	7	484,615	465,047	949,662
5,741	4,809	3,321	2,888	129	121	45	24	528,348	507,861	1,036,209
1,675	1,320	537	526	19	11	...	...	405,148	391,208	796,356
595	519	8,051	7,994	9	4	1	...	203,950	197,526	401,476
5,427	4,817	948	680	5,037	6,014	17,960	17,008	337,276	336,845	674,121
1,758	1,497	1,406	1,178	1,045	1,176	1,271	1,172	158,568	149,143	307,711
3,210	3,126	13,276	12,236	54	40	335	252	379,702	331,203	710,905
956	857	1,626	1,555	127	113	4,883	4,923	193,385	181,446	374,831
18,353	17,094	2,424	1,947	861	802	174	173	473,693	414,231	887,924
635	483	3,611	2,348	1,396	1,323	1,899	1,219	302,563	228,094	530,657
45	37	127	87	34	23	14	8	316,884	250,415	567,249
150	118	43	16	4	4	4,967	3,144	221,074	175,233	396,307
1	...	19	13	3	...	75	58	233,826	184,826	418,652
...	...	27	9	2	...	650	542	331,204	265,733	597,937
8	8	161	117	67	56	1,886	1,252	281,493	227,869	509,362
29	20	4	6	...	...	233	190	134,321	106,293	240,614
119,619	94,709	119,242	98,138	42,739	39,940	69,444	64,613	10,050,623	9,116,797	19,167,420

include Hindus of all castes. "Other Classes" include Buddhists, Sikhs, Jews and all others.

ANNUAL FORM

1	2				
No.	Districts	Muhammadans.		Hindus.	
		Male.	Female.	Male.	Female.
	Western Registration District.				
1	East Khandesh	1,809	1,792	20,258	19,878
2	West Khandesh	479	496	12,334	12,381
3	Nasik	628	624	14,181	13,479
4	Thana	437	429	9,220	8,891
5	Bombay Suburban	148	119	1,181	1,024
6	Kolaba	413	403	8,257	8,118
7	Bombay City	3,163	2,547	9,199	7,777
	Central Registration District.				
8	Ahmednagar	663	559	12,578	11,369
9	Poona	686	652	15,726	14,773
10	Sholapur	1,160	1,091	14,005	13,248
11	Satara	551	583	17,607	16,874
12	Ratnagiri	719	887	13,103	13,907
	Southern Registration District.				
13	Belgaum	1,131	1,121	12,160	12,227
14	Dharwar	1,840	2,020	12,142	12,329
15	Bijapur	1,437	1,422	11,520	11,328
16	Kanara	367	360	5,001	4,635
	Gujarat Registration District.				
17	Surat	964	1,006	9,389	9,068
18	Broach	1,443	1,452	4,735	4,640
19	Kaira	1,120	1,032	10,536	9,213
20	Panch Mahals	336	376	5,450	5,345
21	Ahmedabad	1,899	1,806	12,902	11,990
	Sind Registration District.				
22	Karachi	3,725	2,823	1,859	1,630
23	Hyderabad	2,767	2,116	1,686	1,397
24	Thar and Parkar	1,923	1,567	1,381	957
25	Nawabshah	2,754	2,044	918	743
26	Larkana	5,223	3,857	1,212	1,100
27	Sukkur	4,285	3,158	2,442	2,122
28	Upper Sind Frontier	2,323	1,884	340	302
	Total for the Presidency ...	44,384	38,226	241,266	230,862

No. V—*contd.*

4

NUMBER OF DEATHS REGISTERED.

Jains.		Christians.		Parsis.		Other Classes.		Total.		Total.
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
6	9	8	5	2	1	12	9	22,095	21,694	43,789
9	13	8	6	...	...	...	...	12,830	12,896	25,726
27	20	19	21	4	6	1	1	14,810	14,144	28,954
5	2	284	269	19	16	13	7	9,978	9,524	19,502
12	8	194	189	14	8	2	3	1,551	1,351	2,902
1	2	24	17	...	...	16	17	8,711	8,557	17,268
338	311	795	597	482	386	904	835	14,881	12,454	27,335
11	15	73	73	1	1	...	...	13,321	12,037	25,358
15	17	38	39	9	7	4	4	16,478	15,492	31,970
63	59	18	13	2	...	...	...	15,238	14,411	29,649
159	144	8	5	2	...	...	...	18,322	17,606	35,928
16	19	36	43	...	...	...	...	13,865	14,856	28,721
533	557	58	57	1	...	...	...	13,883	13,962	27,845
134	157	58	55	...	3	...	...	14,174	14,564	28,738
25	24	9	13	...	...	...	...	12,991	12,787	25,778
19	13	175	126	...	...	...	...	5,562	5,404	10,966
115	134	16	12	116	115	2	1	10,602	10,320	20,932
31	25	8	3	27	25	...	...	6,244	6,145	12,389
72	64	158	121	...	...	1	...	11,887	10,430	22,317
24	20	11	5	2	...	...	...	5,823	5,746	11,569
425	433	51	45	13	17	17	13	15,307	14,309	29,616
2	2	60	42	17	13	17	19	5,680	4,529	10,209
...	...	1	...	...	1	...	...	4,453	3,514	7,967
1	...	...	...	...	...	...	...	3,305	2,524	5,829
...	...	1	...	...	...	1	...	3,674	2,787	6,461
...	...	...	...	1	...	...	...	6,436	4,957	11,393
...	...	19	2	3	...	6	6	6,755	5,288	12,043
...	...	...	...	...	...	...	...	2,663	2,186	4,849
2,033	2,053	2,125	1,828	715	599	995	916	291,519	274,484	566,003

ANNUAL FORM

No.	Districts.	Muhammadans.		Hindus.		Jains.	
		Male.	Female.	Male.	Female.	Male.	Female.
	Western Registration District.						
1	East Khandesh	33·78	34·24	41·85	42·10	1·23	2·25
2	West Khandesh	28·84	31·19	45·27	45·60	3·03	7·04
3	Nasik	26·38	28·43	36·37	35·51	6·69	6·81
4	Thana	25·10	29·62	25·99	25·03	3·28	2·69
5	Bombay Suburban	16·97	21·15	17·98	21·90	8·86	12·66
6	Kolaba	29·47	28·03	31·45	30·48	·87	4·11
7	Bombay City	25·07	44·52	16·98	26·87	19·22	49·39
	Central Registration District.						
8	Ahmednagar	34·96	31·28	38·36	34·97	1·60	2·43
9	Poona	29·07	32·74	33·80	32·47	2·23	3·41
10	Sholapur	38·07	38·64	40·31	40·50	18·20	17·39
11	Satara	30·05	33·02	36·48	34·60	19·62	20·01
12	Ratnagiri	20·63	19·04	28·06	24·05	19·53	23·14
	Southern Registration District.						
13	Belgaum	27·67	28·78	29·03	30·32	24·38	27·87
14	Dharwar	25·04	29·04	27·22	28·64	23·34	32·65
15	Bijapur	29·36	30·14	32·50	33·10	14·90	18·18
16	Kanara	29·17	25·05	27·34	27·59	31·93	25·05
	Gujarat Registration District.						
17	Surat	34·34	35·70	33·55	32·35	21·19	27·82
18	Broach	40·27	42·83	40·47	42·10	17·63	16·70
19	Kaira	32·75	33·27	32·05	32·38	22·43	20·46
20	Panch Mahals	24·19	29·38	31·70	33·20	25·10	23·34
21	Ahmedabad	35·40	39·75	32·30	34·36	23·16	25·62
	Sind Registration District.						
22	Karachi	17·47	16·70	22·57	30·33	3·15	4·14
23	Hyderabad	11·96	11·85	19·30	19·47	...	...
24	Thar and Parkar	16·21	16·65	13·86	12·30	6·67	...
25	Nawabshah	15·19	14·58	17·50	16·55	...	...
26	Larkana	18·82	17·37	22·85	24·93	...	...
27	Sukkur	20·39	19·97	30·58	31·05	...	...
28	Upper Sind Frontier	19·28	19·67	25·07	29·34	...	...
	Total for the Presidency ...	21·43	22·62	31·59	32·38	16·99	21·68

No. V—*concld.*

5

RATIO OF DEATHS PER 1,000 OF POPULATION.

Christians.		Parsis.		Other Classes.		Total.		
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Total.
12·80	9·65	7·66	5·61	22·37	15·46	40·51	40·95	40·73
14·65	13·45	...	...	...	...	39·50	40·68	40·08
12·05	13·78	7·86	15·00	19·61	31·25	35·39	34·78	35·09
21·29	20·52	12·40	8·39	81·76	46·66	25·67	25·83	25·75
18·41	19·67	11·24	6·67	23·81	45·45	17·70	21·15	19·15
38·59	35·27	...	...	19·10	18·38	31·18	30·22	30·70
34·69	37·09	17·25	15·89	164·21	224·85	19·79	31·38	23·79
6·66	6·53	11·11	11·11	...	...	36·70	33·34	35·03
7·43	7·15	5·78	4·51	8·81	8·81	32·72	31·80	32·36
16·67	12·32	11·76	...	...	...	39·77	40·03	39·90
2·76	5·64	7·66	...	...	...	21·20	20·22	41·22
11·69	12·88	...	...	...	...	26·41	23·62	24·89
19·28	19·90	16·95	...	...	...	28·65	30·02	29·32
17·46	19·04	...	24·80	...	...	26·88	28·68	27·73
16·76	24·71	...	...	...	...	32·06	32·68	32·36
21·74	24·05	...	...	...	...	27·27	27·36	27·31
16·88	17·65	23·03	19·12	·11	·06	31·48	36·67	31·05
5·69	2·55	25·84	21·26	...	...	39·38	41·20	40·26
11·90	9·69	...	...	2·98	...	31·31	31·49	31·39
6·77	3·23	15·75	...	...	...	30·11	31·67	30·86
21·04	23·11	15·10	21·20	97·70	75·14	32·31	34·54	33·35
16·62	17·96	12·17	9·82	8·95	15·59	18·74	19·86	19·22
7·87	...	...	48·48	...	...	13·97	14·03	13·99
...	...	...	...	...	...	14·94	14·40	14·70
52·63	...	...	...	71·43	...	15·71	15·08	15·43
...	...	500·00	...	...	...	19·73	18·58	19·05
118·01	17·09	44·77	...	3·27	4·79	23·93	23·20	23·69
...	...	...	...	...	...	19·82	20·65	20·15
17·82	18·63	16·73	15·00	14·34	14·18	29·01	30·11	29·53

ANNUAL FORM No. VI.—DEATHS *registered from* BOMBAY PRESIDENCY *Details regarding Births*

1	2	3	4			
			Births.			
No.	Districts and Towns.	Population according to Census of 1921.	Male.	Female.	Total.	Birth-rate.
	A.—DISTRICTS (EXCLUDING TOWNS).					
	Western Registration District.					
1	East Khándesh	918,037	24,972	23,342	48,314	52·62
2	West Khándesh	568,809	16,324	15,280	31,604	55·56
3	Násik	705,858	20,158	18,558	38,716	54·85
4	Thána	694,653	12,503	11,721	24,224	34·87
5	Bombay Suburban	91,948	1,046	950	1,996	21·71
6	Kolába	533,270	11,350	10,923	22,273	41·77
	Central Registration District.					
7	Ahmednagar	667,106	18,612	17,737	36,349	54·49
8	Poona	770,334	16,545	15,458	32,003	41·54
9	Sholápur	576,538	14,394	13,379	27,773	48·17
10	Sátára	963,308	21,009	20,047	41,056	42·62
11	Ratnágiri	1,083,350	19,542	18,315	37,857	34·94
	Southern Registration District.					
12	Belgáum	871,163	19,253	18,804	38,057	43·68
13	Dhárwár	870,565	18,310	18,134	36,444	41·86
14	Bijápur	717,798	15,529	15,013	30,542	42·55
15	Kánara	350,224	6,911	6,813	13,724	39·18
	Gujarat Registration District.					
16	Surat	526,465	9,832	9,291	19,123	36·32
17	Broach	243,112	5,934	5,500	11,434	47·03
18	Káira	604,528	11,457	9,987	21,444	35·42
19	Panch Maháls	331,791	7,223	6,809	14,032	42·29
20	Ahmedabad	568,759	10,302	9,394	19,696	34·63
	Sind Registration District.					
21	Karáchi	307,576	2,583	1,925	4,508	14·65
22	Hyderabad	480,469	4,173	2,892	7,065	14·70
23	Thar and Párkar	386,343	5,325	4,434	9,759	25·26
24	Nawábsháh	402,915	5,175	3,824	8,999	22·33
25	Larkana	562,636	5,497	4,217	9,714	17·26
26	Sukkur	394,216	3,356	2,608	5,964	15·13
27	Upper Sind Frontier	280,036	2,397	1,730	4,127	17·94
	Total of Districts ...	15,421,829	309,712	287,085	596,797	38·69

different causes in the DISTRICTS *and* TOWNS *of the during the year 1930.*
also shown, column 4.

5	6	7	8	9	10	11	
						Injuries.	
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Suicide.	
						Male.	Female.
1,428	5,169	...	18,144	1,440	4,389	7	7
903	2,365	...	10,384	646	2,985	4	4
1,176	587	29	10,905	1,048	5,109	3	4
55	446	124	6,984	807	4,389	19	11
...	30	5	337	276	588	4	5
132	442	...	6,014	1,468	3,611	7	9
914	356	12	5,472	1,280	4,382	3	8
1,328	478	25	10,050	1,502	3,965	10	9
2,102	224	151	7,693	1,432	2,252	18	9
3,718	460	466	12,531	2,382	3,243	20	15
53	354	64	9,314	959	5,935	2	1
567	331	1,148	6,339	2,839	3,387	29	41
43	255	1,968	7,661	873	2,955	25	17
1,342	309	250	9,259	1,489	2,599	20	25
...	136	103	3,483	667	743	10	5
18	563	43	5,593	259	5,439	9	9
...	544	...	5,514	263	1,919	2	...
...	504	...	6,529	604	5,983	15	8
198	235	...	6,095	191	1,272	2	6
...	538	...	8,361	309	2,683	3	4
...	88	...	2,841	22	653	1	...
...	25	...	4,473	24	621	...	...
...	68	...	3,969	17	894	1	1
...	61	...	5,304	21	471	1	1
...	36	...	2,630	38	355	1	...
...	6	...	7,958	52	201	1	...
...	1	...	4,392	17	102	...	2
13,972	14,614	4,388	195,529	20,925	69,125	214	206

ANNUAL FORM

1	2	11				12	13
		INJURIES—*contd.*					
No.	Districts and Towns.	Wounding or Accident.	Snake-bite, or killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.
	A.—DISTRICTS (EXCLUDING TOWNS).						
	Western Registration District.						
1	East Khandesh	157	25	8	204	8,530	39,251
2	West Khandesh	112	55	7	182	6,848	24,318
3	Nasik	169	47	8	231	6,764	25,849
4	Thana	181	174	5	390	4,849	18,044
5	Bombay Suburban	58	4	...	66	521	1,823
6	Kolaba	145	51	9	214	4,721	16,603
	Central Registration District.						
7	Ahmednagar	169	31	8	319	11,348	23,963
8	Poona	227	37	5	288	6,372	24,008
9	Sholapur	246	28	4	300	7,748	21,902
10	Satara	348	98	12	493	11,068	34,361
11	Ratnagiri	167	257	4	431	12,086	27,196
	Southern Registration District.						
12	Belgaum	361	37	10	478	10,856	25,695
13	Dharwar	278	38	5	363	10,167	24,285
14	Bijapur	217	22	4	288	7,423	23,959
15	Kanara	145	24	...	184	4,807	10,123
	Gujarat Registration District.						
16	Surat	126	28	4	176	2,562	14,953
17	Broach	54	14	2	72	1,774	10,066
18	Kaira	172	32	9	236	4,801	18,157
19	Panch Mahals	71	37	3	119	2,170	10,325
20	Ahmedabad	138	49	5	199	2,376	14,466
	Sind Registration District.						
21	Karachi	60	33	...	93	364	4,011
22	Hyderabad	57	50	1	108	315	5,566
23	Thar and Parkar	43	74	...	119	559	5,626
24	Nawabshah	57	42	1	102	253	6,219
25	Larkana	100	43	2	145	336	10,440
26	Sukkur	51	20	1	73	250	8,540
27	Upper Sind Frontier	59	3	...	64	70	4,646
	Total of Districts ...	3,956	1,351	110	5,837	129,438	453,825

No. VI—*contd.*

14

RATIO OF DEATHS PER 1,000 OF POPULATION.

Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Injuries.	All other causes.	From all causes. For the year.	From all causes. Mean of previous five years.
1·55	5·63	...	19·72	1·57	4·73	·22	9·28	42·74	33·63
1·59	4·15	...	18·25	1·14	5·25	·32	12·04	42·74	30·11
1·67	·83	·04	15·45	1·49	7·24	·33	9·57	36·62	32·01
·08	·64	·18	10·05	1·16	6·32	·56	6·98	25·97	22·56
...	·33	·06	3·66	3·00	6·40	·71	5·67	19·83	18·64
·25	·83	...	11·27	2·77	7·14	·40	8·85	31·51	26·75
1·37	·53	·03	8·20	1·92	6·57	·33	17·01	35·95	32·07
1·72	·62	·03	13·03	1·96	5·15	·37	8·28	31·16	26·53
3·65	·39	·26	13·34	2·48	3·91	·52	13·44	37·99	31·24
3·86	·48	·48	13·01	2·47	3·87	·51	11·49	35·67	31·91
·05	·33	·06	8·58	·89	3·63	·40	11·16	25·10	23·72
·65	·38	1·30	7·28	3·26	3·83	·55	12·46	29·72	29·40
·05	·29	2·26	8·80	1·00	3·39	·42	11·68	27·90	31·29
1·87	·43	·35	12·90	2·08	3·62	·40	10·34	31·99	27·58
...	·39	·29	9·94	1·90	2·12	·52	13·72	28·90	32·39
·03	1·07	·08	11·20	·49	10·33	·33	4·87	28·40	27·22
...	3·24	...	22·67	1·08	7·89	·30	7·30	41·48	34·04
...	·83	...	10·80	1·00	9·90	·39	7·11	30·03	28·71
·58	·86	...	18·36	·58	3·84	·36	6·54	31·12	23·65
...	·95	...	14·70	·54	4·71	·35	4·18	25·43	26·07
...	·12	...	9·28	·07	2·12	·30	1·18	13·04	14·25
...	·05	...	9·31	·05	1·29	·22	·65	11·58	13·49
...	·17	...	10·27	·04	2·32	·31	1·45	14·56	16·48
...	·14	..	13·16	·06	1·16	·25	·62	15·38	18·23
...	·06	...	17·11	·06	·45	·27	·59	18·55	19·80
...	·03	...	20·19	·13	·51	·18	·63	21·66	19·48
...	...	...	19·09	·07	·44	·28	·80	20·19	15·99
·91	·95	·28	12·68	1·36	4·48	·38	8·39	29·43	26·78

1	2	3	4			
			Births.			
No.	Districts and Towns.	Population according to Census of 1921.	Male.	Female.	Total.	Birth-rate.
	B.—TOWNS.					
	East Khándesh District.					
1	Jalgaon	23,696	369	321	690	29·12
2	Bhusáwal	24,933	380	320	650	26·07
3	Chopda	16,930	221	158	419	24·74
4	Dharangaon	14,824	310	253	563	37·91
5	Párola	12,079	229	207	436	36·09
6	Amalner	17,068	269	204	473	27·71
7	Erandol	12,489	270	230	500	40·04
8	Nasirabad	12,188	335	275	610	50·05
9	Chálisgaon	11,990	248	223	471	39·28
10	Yawal	10,888	96	52	148	13·59
	West Khandesh District.					
11	Dhulia	30,061	664	678	1,342	44·64
12	Nandurbár	13,842	366	369	735	53·10
	Nasik District.					
13	Násik	42,715	639	600	1,239	29·01
14	Yeola	13,911	175	155	330	23·73
15	Málegaon	23,711	379	328	707	29·81
16	Igatpuri	9,977	96	89	185	18·54
17	Manmád	11,866	123	94	217	18·29
18	Trimbak	4,538	90	88	178	38·12
19	Deoláli Cantonment	12,640	16	11	27	2·14
	Thana District.					
20	Thána	22,116	207	200	407	18·43
21	Bhiwandi	12,188	196	192	388	31·83
22	Kalyán	17,573	215	192	407	23·16
23	Bassein	10,364	104	87	191	18·43
	Bombay Suburban District.					
24	Bándra	28,738	376	340	716	24·92
25	Kurla	26,050	368	365	733	28·13
26	Santa Cruz Cantonment	4,701	3	2	5	1·06

No. VI—*contd.*

5	6	7	8	9	10	11	
						INJURIES	
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Suicide.	
						Male.	Female.
41	46	...	193	57	131	...	...
5	26	...	249	10	72	...	...
...	79	...	94	10	35	...	...
1	88	...	180	45	101	...	...
1	15	...	174	20	77	...	...
10	42	...	191	8	104	...	...
2	109	...	180	18	52	...	...
59	27	...	318	43	116	...	...
42	23	...	198	12	64	...	...
...	4	...	53	4	37	...	...
19	90	...	130	49	205	1	...
12	44	...	207	29	117	...	...
50	47	3	186	78	449	3	3
12	7	...	256	5	115	1	...
5	106	...	188	64	100	...	...
...	1	...	76	5	26	1	...
40	...	...	44	7	56	...	...
1	2	...	32	3	20	...	...
1	...	...	5	6	25	...	...
4	39	...	85	39	173	...	1
...	75	26	69	43	89	...	...
1	15	15	67	18	137	2	...
...	4	...	19	19	57	...	...
...	4	1	44	63	87	3	...
...	1	4	144	74	106	2	...
...	...	...	...	...	...	...	...

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No	Districts and Towns.	2	11 Injuries—*contd.*			12	13
		Wounding or Accident.	Snake-bite, or killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.
	B.—Towns.						
	East Khandesh District.						
1	Jalgaon	8	...	...	8	210	686
2	Bhusawal	8	...	...	8	147	517
3	Chopda	1	...	...	1	51	270
4	Dharangaon	5	...	...	5	160	680
5	Parola	1	1	...	2	91	339
6	Amalner	4	...	...	4	89	441
7	Erandol	3	...	...	3	105	469
8	Nasirabad	...	...	...	...	189	702
9	Chalisgaon	2	...	2	4	85	378
10	Yawal	4	...	...	4	10	113
	West Khandesh District.						
11	Dhulia	10	...	...	11	390	903
12	Nandurbar	7	...	1	8	93	510
	Nasik District.						
13	Nasik	34	2	1	43	642	1,498
14	Yeola	3	1	1	6	54	465
15	Malegaon	8	...	...	8	184	605
16	Igatpuri	3	...	...	4	48	155
17	Manmad	3	...	...	3	46	196
18	Trimbak	1	...	...	1	49	166
19	Deolali Cantonment	...	...	...	...	41	78
	Thana District.						
20	Thana	11	...	...	13	184	486
21	Bhiwandi	4	...	...	4	118	419
22	Kalyan	5	...	1	8	101	362
23	Bassein	3	...	...	3	89	191
	Bombay Suburban District.						
24	Bandra	9	1	...	13	333	445
25	Kurla	5	1	...	8	296	633
26	Santa Cruz Cantonment	...	...	...	...	1	1

No. VI—*contd.*

14

RATIO OF DEATHS PER 1,000 OF POPULATION.

Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Injuries.	All other causes.	From all causes. For the year.	From all causes. Mean of previous five years.
1·73	1·94	...	8·14	2·40	5·52	·34	8·86	28·95	27·01
·20	1·04	...	9·99	·40	2·88	·32	5·90	20·74	21·20
...	4·67	...	5·55	·59	2·07	·06	3·02	15·95	15·95
·06	5·04	...	12·13	3·03	6·81	·34	10·78	39·12	25·90
·08	1·24	...	14·40	1·65	6·37	·16	7·53	31·46	30·05
·58	2·46	...	11·19	·47	6·09	·22	4·80	25·84	17·22
·16	3·72	...	14·41	1·44	4·16	·24	8·41	37·55	29·77
4·84	2·21	...	26·09	3·53	9·52	...	11·34	57·59	37·66
3·50	1·92	...	16·51	1·00	5·33	·33	2·92	31·53	25·52
...	·37	...	4·84	·37	3·40	·37	0·91	10·29	16·62
·63	2·99	...	4·32	1·63	6·62	·37	13·27	30·04	24·51
·87	3·18	...	14·95	2·10	8·45	·57	6·72	36·84	25·86
1·17	1·10	·07	4·36	1·82	10·51	1·01	15·03	35·07	33·58
·86	·50	...	18·41	·36	8·26	·43	4·60	33·42	34·79
·21	4·47	...	7·92	2·70	4·22	·34	5·65	25·51	33·51
...	·10	...	7·62	·50	2·60	·40	4·31	15·53	19·64
3·87	...	...	3·70	·59	4·72	·25	3·87	16·52	18·23
·22	·44	...	7·05	·66	4·41	·22	10·80	23·80	20·04
·08	...	...	·40	·48	1·98	...	3·24	6·17	5·78
·18	1·77	...	3·84	1·77	7·82	·54	6·06	21·98	18·63
...	5·15	2·13	5·66	3·53	7·30	·33	9·27	34·38	29·86
·06	·85	·85	3·81	1·03	7·79	·46	5·75	20·60	22·25
...	·39	...	1·83	1·83	5·50	·29	8·59	18·43	19·30
..	·14	·03	1·52	2·19	3·03	·45	8·13	15·47	15·41
...	·04	·15	5·52	2·84	4·07	·31	11·36	24·29	21·80
...	...	...	...	...	...	...	·21	·21	1·49

1	2	3	4			
			Births.			
No.	Districts and Towns.	Population according to Census of 1931.	Male.	Female.	Total.	Birth-rate.
	B.—Towns—*contd.*					
	Kolaba District.					
27	Alibág	5,253	95	85	180	34·26
28	Panwel	8,622	108	97	205	23·78
29	Mahád	7,192	65	63	128	17·80
30	Uran	8,135	52	37	89	10·94
31	City of Bombay	1,148,315	12,850	12,196	25,046	21·80
	Ahmednagar District.					
32	Ahmednagar	33,138	732	744	1,476	44·54
33	Sangamner	12,737	168	120	288	22·61
34	Ahmednagar Cantonment	10,997	147	144	291	26·46
	Poona District.					
35	Poona City	136,122	2,858	2,548	5,406	40·61
36	Poona Suburban	13,971	59	52	111	7·94
37	Bárámati	11,905	197	166	363	30·49
38	Khed	7,013	109	96	205	29·23
39	Lonávla	10,471	121	84	205	19·58
40	Junnár	7,376	123	111	234	31·72
41	Poona Cantonment	25,498	115	113	228	8·94
42	Kirkee do.	7,991	108	103	211	26·40
	Sholapur District.					
43	Sholápur	119,347	2,577	2,515	5,092	42·66
44	Bársi	22,074	353	354	707	32·03
45	Pandharpur	25,210	558	446	1,004	39·82
	Satara District.					
46	Sátara	22,454	199	206	405	18·04
47	Wái	10,208	161	116	277	27·14
48	Karád	11,255	106	115	221	19·64
49	Ashta.	9,016	137	119	256	28·39
50	Islámpur	7,915	101	109	210	26·53
	Ratnagiri District.					
51	Ratnágiri	18,286	240	223	463	25·32
52	Vengurla	19,126	317	256	573	29·96
53	Málwan	22,213	289	244	533	23·99
54	Chiplun	11,005	112	111	223	20·27

No. VI—*contd.*

5	6	7	8	9	10	11	
						Injuries.	
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Suicide.	
						Male.	Female.
...	1	...	37	6	18	...	1
...	4	...	24	9	81	...	...
10	4	...	24	4	22	1	1
...	1	...	41	11	9	...	...
40	1,671	20	2,328	1,452	11,111	59	22
13	5	...	129	94	371	...	1
11	8	...	34	13	44	...	...
3	...	...	61	11	81	...	...
30	876	1	1,448	317	1,424	4	2
2	14	...	112	17	29	...	1
22	4	88	102	38	54	...	...
9	7	...	23	...	39	...	...
6	...	...	90	11	80	...	...
...	...	...	41	3	61	...	...
2	...	...	40	30	123	...	...
...	4	...	18	30	65	3	...
301	15	1	2,466	526	548	6	7
23	43	37	423	37	44	1	...
71	12	1	362	77	263	4	2
14	23	...	176	20	135	1	...
41	...	1	62	11	32	...	...
5	6	...	52	14	39	3	1
11	...	...	40	13	20	...	...
11	2	...	56	8	61	...	...
...	...	...	75	51	46	...	...
...	2	30	89	13	79	...	2
2	12	...	78	4	55	...	...
...	3	115	85	4	53	...	...

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1	2	11 Injuries—*contd.*				12	13
No.	Districts and Towns.	Wounding or Accident.	Snake-bite, or killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.
	B.—Towns—*contd.*						
	Kolaba District.						
27	Alibag	6	...	...	7	40	104
28	Panwel	2	...	...	2	30	150
29	Mahad	...	...	...	2	55	121
30	Uran	...	...	...	...	29	91
31	City of Bombay	590	8	...	688	10,025	27,335
	Ahmednagar District.						
32	Ahmednagar	7	...	...	8	294	914
33	Sangamner	2	...	...	2	137	339
34	Ahmednagar Cantonment	2	...	...	2	64	222
	Poona District.						
35	Poona City	19	2	...	27	2,088	6,911
36	Poona Suburban	3	1	...	5	70	249
37	Baramati	3	...	...	3	141	452
38	Khed	...	...	...	...	45	123
39	Lonavla	8	1	...	9	89	255
40	Junnar	2	...	...	2	39	146
41	Poona Cantonment	...	...	...	...	93	288
42	Kirkee do.	...	...	...	3	118	338
	Sholapur District.						
43	Sholapur	48	...	6	67	1,459	5,376
44	Barsi	13	1	1	16	360	983
45	Pandharpur	29	2	...	37	566	1,388
	Satara District.						
46	Satara	17	...	...	18	333	719
47	Wai	...	1	...	1	78	236
48	Karad	3	4	...	11	103	230
49	Ashta	6	...	...	6	98	188
50	Islampur	5	2	...	7	59	204
	Ratnagiri District.						
51	Ratnagiri	4	...	...	4	125	31
52	Vengurla	2	2	1	7	271	49
53	Malwan	1	1	...	2	236	38
54	Chiplun	1	...	...	1	78	38

No. VI—*contd.*

14

RATIO OF DEATHS PER 1,000 OF POPULATION.

Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Injuries.	All other causes.	From all causes. For the year.	From all causes. Mean of previous five years.
...	·19	...	7·05	1·14	2·47	1·33	7·62	19·80	20·75
...	·46	...	2·78	1·05	9·40	·23	3·48	17·40	17·74
1·39	·55	...	3·34	·55	3·06	·28	7·65	16·82	17·66
...	·12	...	5·04	1·35	1·11	...	3·57	11·19	11·19
·03	1·45	·02	2·03	1·26	9·67	·60	8·73	23·79	25·09
·39	·15	...	3·88	2·84	11·21	·24	8·87	27·58	20·18
·86	·63	...	2·66	1·02	3·46	·16	9·97	18·76	17·21
·27	...	...	5·55	1·00	7·37	·18	5·82	20·19	19·82
·23	6·59	...	10·90	2·38	10·71	·20	15·79	46·80	37·65
·14	1·00	...	8·01	1·22	2·08	·36	5·01	17·82	14·75
1·85	·34	7·39	8·57	3·19	4·54	·25	11·84	37·97	27·73
1·98	·99	...	3·28	...	5·56	...	6·42	17·53	18·62
·57	...	...	8·60	1·04	7·65	·86	5·68	24·35	26·24
...	...	...	5·56	·41	8·28	·27	5·29	19·81	22·97
0·03	...	...	1·57	7·17	4·82	...	3·65	11·29	11·78
...	·50	...	2·26	3·75	8·12	·38	14·77	29·78	30·15
2·52	·13	·01	20·65	4·41	4·59	·56	12·17	45·05	35·88
1·04	1·95	1·68	19·16	1·68	1·99	·72	16·31	44·53	38·99
2·82	·47	0·04	14·36	3·06	10·43	1·47	22·41	55·06	53·53
·62	1·03	...	7·83	·80	6·02	·80	14·83	32·02	28·45
4·02	...	·10	6·07	1·08	3·13	·10	7·64	22·14	22·63
·44	·53	...	4·63	1·24	3·47	·98	9·15	20·44	23·96
1·22	...	...	4·44	1·44	2·21	·67	10·87	20·85	21·27
1·39	·25	...	7·08	1·01	7·70	·89	7·45	25·77	23·37
...	...	...	4·10	3·34	2·51	·22	6·83	17·00	17·97
...	·10	1·57	4·65	·68	4·13	·37	14·17	25·67	22·25
·09	·54	...	3·29	·18	2·47	·09	10·62	17·28	19·64
...	·27	10·45	7·72	·36	4·82	·09	7·09	30·80	20·31

1	2	3	4			
			Births.			
No.	Districts and Towns.	Population according to Census of 1921.	Male.	Female.	Total.	Birth-rate.
	B.—TOWNS—*contd.*					
	Belgaum District.					
55	Belgaum	36,214	574	518	1,092	30·15
56	Gokak	9,989	175	175	350	35·04
57	Athni	13,538	173	165	338	24·97
58	Nipani	11,878	176	194	370	31·15
59	Belgaum Cantonment	6,880	46	42	88	12·79
	Dharwar District.					
60	Dharwar	34,327	667	626	1,293	37·67
61	Hubli	69,140	1,133	955	2,088	30·20
62	Gadag-Bettigeri	41,158	838	805	1,643	39·92
63	Ranebennur	13,980	343	332	675	48·46
64	Nawalgund	7,089	105	105	210	29·62
	Bijapur District.					
65	Bijapur	32,471	592	562	1,154	35·54
66	Bagalkot	19,471	391	344	735	37·75
67	Guledgud	14,760	310	310	620	42·00
68	Ilkal	11,856	259	212	471	39·73
	Kanara District.					
69	Karwar	14,468	182	160	342	23·65
70	Kumta	14,291	144	164	308	21·55
71	Gokarn	8,307	116	109	225	27·09
72	Honawar	7,035	130	105	235	33·40
73	Bhatkal	7,134	143	111	254	35·04
	Surat District.					
74	Surat	117,424	2,659	2,354	5,013	42·69
75	Bulsar	19,681	315	276	591	30·03
76	Rander	10,547	285	238	468	44·37
	Broach District.					
77	Broach	42,626	1,044	933	1,977	46·38
78	Jambusar	10,217	281	254	535	52·36
79	Ankleshwar	11,756	241	230	471	40·06

No. VI—*contd.*

5	6	7	8	9	10	11	
						Injuries.	
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Suicide.	
						Male.	Female.
4	15	3	232	94	245	1	...
13	...	14	60	25	26	...	...
9	2	45	70	7	40	1	1
...	...	10	98	22	65	...	1
...	1	...	22	...	8	2	...
...	9	12	194	64	175	4	1
...	3	42	313	47	214	2	...
97	37	9	477	50	339	2	1
...	2	3	72	21	87	...	...
...	...	...	30	9	28	...	...
22	71	2	193	28	135	2	3
9	2	116	136	28	94	2	...
...	6	...	112	2	81	2	...
...	3	...	140	1	74	...	...
...	...	19	39	24	16	...	...
...	3	19	83	22	27	...	...
...	...	...	68	10	30	1	...
...	...	...	35	12	5	...	...
...	1	...	62	5	19	1	...
...	644	...	781	289	1,487	...	...
...	104	1	32	7	142	2	...
...	4	...	152	4	88	...	...
...	263	...	226	27	225	...	1
...	16	...	171	7	96	...	...
...	101	...	266	1	85	...	...

ANNUAL FORM

1	2	11				12	13
		INJURIES—*contd.*					
No.	Districts and Towns.	Wounding or accident.	Snake-bite, or killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.
	B.—TOWNS—*contd.*						
	Belgaum District.						
55	Belgaum	18	...	...	10	486	1,127
56	Gokak	1	...	...	4	9	234
57	Athni	4	...	...	6	61	240
58	Nipani	3	...	...	4	58	238
59	Belgaum Cantonment	4	...	...	6	54	91
	Dharwar District.						
60	Dharwar	21	...	...	26	507	987
61	Hubli	18	...	...	20	609	1,248
62	Gadag-Bettigori	17	1	1	22	624	1,655
63	Ranebennur	8	...	...	8	288	401
64	Nawalgund	13	....	...	13	82	163
	Bijapur District.						
65	Bijapur	13	2	...	20	502	973
66	Bagalkot	5	...	5	12	299	695
67	Guledgud	4	...	...	6	342	549
68	Ilkal	4	...	...	4	379	601
	Kanara District.						
69	Karwar	5	...	1	6	98	202
70	Kumta	1	...	...	1	80	235
71	Gokarn	5	...	...	6	58	172
72	Honawar	1	...	...	1	34	87
73	Bhatkal	13	1	1	16	326	843
	Surat District.						
74	Surat	41	...	1	42	1,945	5,188
75	Bulsar	3	...	...	5	192	483
76	Rander	1	...	...	1	64	308
	Broach District.						
77	Broach	28	...	...	29	679	1,449
78	Jambusar	3	...	...	3	67	360
79	Ankleshwar	4	...	...	4	37	494

No. VI—*contd.*

14

RATIO OF DEATHS PER 1,000 OF POPULATION.

Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Injuries.	All other causes.	From all causes. For the year.	From all causes. Mean of previous five years.
·11	1·24	·08	6·40	2·60	6·77	·52	13·39	31·11	31·12
1·30	...	1·40	6·01	2·50	3·60	·40	9·21	23·42	29·08
·66	·15	3·32	5·17	·52	2·95	·44	4·51	17·73	18·39
...	...	·84	8·25	1·85	5·47	·34	4·97	21·72	24·00
...	·15	...	3·20	...	1·16	·87	7·85	13·23	14·10
...	·26	·35	5·65	1·86	5·10	·76	14·77	28·75	27·44
...	·04	·61	4·53	·68	3·10	·29	8·81	18·05	22·75
2·36	·90	·22	11·59	1·21	8·24	·53	15·16	40·21	37·86
...	·14	·22	5·17	1·51	6·25	·57	14·93	28·79	39·34
...	...	...	4·23	1·27	3·95	1·83	11·57	22·85	27·65
·68	2·19	·06	5·94	·86	4·16	·62	15·46	29·97	24·70
·46	·10	5·96	6·98	1·44	4·83	·62	15·36	35·75	33·90
...	·41	...	7·59	·14	5·49	·41	23·17	37·20	36·25
...	·25	...	11·81	·08	6·24	·34	31·97	50·69	39·90
...	...	1·31	2·70	1·66	1·11	·41	6·78	13·97	15·83
...	·21	1·33	5·81	1·54	1·89	·07	5·60	16·44	17·42
...	...	...	8·19	1·20	3·61	·72	6·98	20·71	22·75
...	...	...	4·98	1·71	·71	·14	4·83	12·37	19·90
...	·08	·74	5·60	1·42	1·89	·31	6·40	16·45	18·89
...	5·48	...	6·65	2·46	12·67	·36	16·56	44·18	39·11
...	5·28	·05	1·62	·36	7·22	·26	9·75	24·54	20·97
...	·38	...	14·41	·38	7·86	·10	6·07	29·20	24·31
...	6·17	...	5·30	·64	5·28	·68	15·93	34·00	29·45
...	1·56	...	16·74	·69	9·40	·29	6·55	35·23	32·11
...	8·59	...	22·63	·08	7·23	·34	3·15	42·02	29·62

1	2	3	4			
			Births.			
No.	Districts and Towns.	Population according to Census of 1931.	Male.	Female.	Total.	Birth-rate.
	B.—TOWNS—*contd.*					
	Kaira District.					
80	Kaira ...	8,277	162	130	292	35·28
81	Mehmedabad ...	6,236	157	144	301	48·27
82	Nadiad ...	31,919	702	645	1,347	42·20
83	Borsad ...	12,113	390	344	734	60·60
84	Anand ...	11,024	174	124	298	27·03
85	Umreth ...	14,024	368	328	696	48·91
86	Dakore ...	7,990	135	117	252	31·54
87	Kapadvanj ...	14,794	337	320	647	43·73
	Panch Mahals District					
88	Godhra ...	26,969	548	396	944	35·00
89	Dohad ...	16,071	319	280	599	37·27
	Ahmedabad District.					
90	Ahmedabad ...	270,599	7,396	6,813	14,209	52·51
91	Dhandhuka ...	8,056	227	167	394	48·91
92	Viramgaon ...	26,252	348	377	725	27·61
93	Dholka ...	12,513	338	294	632	50·50
94	Ahmedabad Cantonment. ...	1,745	16	12	28	16·04
	Karachi District.					
95	Karachi ...	199,014	5,463	5,377	10,840	54·47
96	Tatta ...	8,470	72	57	129	15·23
97	Kotri ...	9,072	55	57	112	12·34
98	Karachi Cantonment ...	6,525	134	133	267	40·91
	Hyderabad District.					
99	Hyderabad ...	72,625	1,499	1,423	2,922	40·23
100	Halla ...	5,757	64	47	111	19·28
101	Matiari ...	4,633	51	32	83	17·88
102	Hyderabad Cantonment ...	3,760	21	11	32	8·50
	Thar and Parkar District.					
103	Umarkot ...	4,199	53	30	83	19·76
104	Mirpurkhas ...	5,765	55	41	96	16·65

No. VI—*contd.*

5	6	7	8	9	10	11	
						Injuries.	
						Suicide.	
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Male.	Female.
...	15	...	64	9	68	...	...
...	11	...	180	9	36	...	...
...	205	...	555	22	249	...	...
31	38	...	270	40	29	...	...
4	37	...	205	4	34	...	...
1	9	...	266	6	199	...	...
...	37	...	171	15	90	...	...
...	...	...	346	12	71	...	...
...	35	...	363	21	36	...	...
46	82	...	361	26	6	...	...
1	847	...	4,290	382	3,829	7	3
...	...	...	87	14	97	...	...
...	151	...	415	13	324	...	...
...	52	...	194	8	62	...	...
...	9	...	12	6	12	...	...
...	79	...	564	460	2,206	3	...
...	2	...	42	2	61	...	...
...	...	...	55	14	24	...	...
...	...	...	31	2	7	...	...
...	181	...	264	63	861	...	1
...	...	...	39	...	12	...	...
...	4	...	51	...	25	...	...
...	...	...	19	...	1	...	...
...	...	...	33	1	32	...	...
...	2	...	37	2	40	...	...

ANNUAL FORM

1	2	11				12	13
		INJURIES—*contd.*					
No.	Districts and Towns.	Wounding or accident.	Snake-bite, or killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.
	B.—TOWNS—*contd.*						
	Kaira District.						
80	Kaira	2	1	...	3	64	223
81	Mehmedabad	3	...	...	3	78	267
82	Nadiad	21	1	...	22	264	1,317
83	Borsad	...	...	...	...	122	530
84	Anand	3	...	...	3	28	310
85	Umreth	5	...	...	5	111	697
86	Dakore	8	...	...	8	42	363
87	Kapadvanj	5	...	...	5	119	553
	Panch Mahals District.						
88	Godhra	...	...	...	...	26	683
89	Dohad	5	1	...	6	34	561
	Ahmedabad District.						
90	Ahmedabad	124	2	4	140	3,015	13,404
91	Dhandhuka	3	1	...	4	71	273
92	Viramgaon	5	...	...	5	74	982
93	Dholka	4	...	...	4	124	444
94	Ahmedabad Cantonment	...	...	...	...	8	47
	Karachi District.						
95	Karachi	77	3	...	88	2,468	5,850
96	Tatta	1	...	...	1	38	141
97	Kotri	1	...	...	1	25	119
98	Karachi Cantonment	...	...	...	...	48	88
	Hyderabad District.						
99	Hyderabad	26	1	5	33	815	2,217
100	Halla	2	1	...	3	13	67
101	Matiari	1	...	...	1	11	93
102	Hyderabad Cantonment	...	...	...	...	5	25
	Thar and Parkar District.						
103	Umarkot	4	...	...	4	26	96
104	Mirpurkhas	4	1	...	5	21	107

No. VI—*contd.*

14

RATIO OF DEATHS PER 1,000 OF POPULATION.

Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Injuries.	All other causes.	From all causes. For the year.	From all causes. Mean of previous five years.
.....	4·81	...	7·73	1·09	8·22	·36	7·73	26·99	26·29
.....	1·76	...	20·65	1·44	5·78	·48	12·51	42·82	37·68
.....	6·42	...	17·30	·69	7·80	·69	8·27	41·26	38·12
2·56	3·14	...	22·29	3·30	2·39	...	10·07	43·75	35·63
·26	3·36	...	18·60	·36	3·06	·37	2·09	28·12	23·87
·07	·64	...	18·97	·42	14·19	·36	7·91	42·56	35·08
.....	4·63	...	21·40	1·88	11·26	1·00	5·26	45·43	37·25
.....	...	...	23·38	·81	4·81	·34	8·04	37·38	28·54
.....	1·30	...	20·88	·77	1·33	...	1·04	25·32	22·80
2·86	5·10	...	22·47	1·62	·37	·37	2·12	34·91	22·92
.....	3·13	...	15·85	1·41	14·15	·52	14·47	49·53	44·31
.....	...	...	10·80	1·73	12·05	·50	8·81	33·89	31·82
.....	5·75	...	15·81	·50	12·34	·19	2·82	37·41	31·35
.....	4·15	...	15·50	·64	4·95	·32	9·91	35·48	30·59
.....	5·16	...	6·88	3·43	6·87	...	4·59	26·93	18·56
.....	·39	...	2·83	2·31	11·08	·41	12·34	29·35	31·89
.....	·23	...	4·95	·23	7·20	·12	3·89	16·64	20·78
.....	...	...	6·06	1·54	2·64	·11	2·75	13·10	19·51
.....	...	...	4·75	·31	1·07	...	7·35	13·48	12·43
.....	2·49	...	3·63	·87	11·85	·45	11·22	30·52	22·71
.....	...	...	6·77	.....	2·09	·52	2·25	11·64	10·25
.....	·86	...	10·99	.....	5·39	·21	2·37	19·83	23·07
.....	...	...	5·05	.....	·27	...	1·33	6·65	7·17
.....	...	...	7·86	·24	7·62	·95	6·19	22·86	27·62
.....	·35	...	6·41	·34	6·95	·86	3·65	18·56	21·16

1	2	3	4			
			Births.			
No.	Districts and Towns.	Population according to Census of 1921.	Male.	Female.	Total.	Birth-rate.
	B.—TOWNS—*concld.*					
	Nawabshah District.					
105	Nawabshah ...	2,771	27	17	44	15·87
106	Tando Adam ...	12,966	167	152	319	24·60
	Larkana District.					
107	Larkana ...	17,700	320	294	614	34·69
108	Kambar ...	7,613	103	92	195	25·61
109	Ratodero ...	5,565	62	66	128	23·00
110	Sehwan ...	4,423	35	26	61	13·78
	Sukkur District.					
111	Sukkur ...	42,046	577	426	1,003	23·85
112	Shikarpur ...	55,347	815	751	1,566	28·29
113	Rohri ...	11,378	125	108	233	20·47
114	Garhi Yasin ...	6,375	104	76	180	28·23
	Upper Sind Frontier District.					
115	Jacobabad ...	10,518	266	46	112	10·59
	Total of Towns ...	3,743,785	62,493	57,662	120,155	32·09
	Total for the Presidency ...	19,165,614	372,205	344,747	716,952	37·41

No. VI—*concld.*

5	6	7	8	9	10	11	
						Injuries.	
Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory. Diseases.	Suicide.	
						Male.	Female.
.....	.....	.....	31	.....	.....	.....	...
.....	.....	.....	130	4	67	.....	...
.....	2	.....	217	15	69	1	...
.....	.....	.....	419	.....	12	1	1
.....	.....	.....	155	1	.....	.....	...
.....	.....	.....	21	2	23	.....	...
.....	4	.....	693	25	165	.....	...
.....	.....	.....	769	45	348	.....	...
.....	.....	.....	245	15	81	.....	...
.....	.....	.....	186	.....	.....	.....	...
.....	.....	.....	159	4	18	.....	...
1,170	6,730	638	27,746	5,611	30,553	128	57
15,142	21,341	5,026	223,274	26,536	99,678	342	263

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1	2	11				12	13
		INJURIES—*contd.*					
No.	Districts and Towns.	Wounding or accident.	Snake-bite or killed by wild beasts.	Rabies.	Total.	All other causes.	Total deaths from all causes.
	B.—TOWNS—*concld.*						
	Nawabshah District.						
105	Nawabshah ...	2	...	...	2	1	34
106	Tando Adam ...	4	2	1	7	7	215
	Larkana District.						
107	Larkana ...	2	1	...	3	252	559
108	Kambar ...	4	...	...	6	22	159
109	Ratodero ...	1	...	...	1	6	163
110	Sehwan ...	2	...	...	2	24	72
	Sukkur District.						
111	Sukkur ...	49	...	...	49	159	1,094
112	Shikarpur ...	13	...	...	13	668	1,843
113	Rohri ...	5	1	1	7	29	377
114	Garhi Yasin ...	...	...	...	...	3	189
	Upper Sind Frontier District.						
115	Jacobabad ...	...	...	...	...	22	203
	Total of Towns ...	1,539	51	33	1,808	37,923	112,178
	Total for the Presidency ...	5,495	1,402	143	7,645	167,361	566,003

No. VI—*concld.*

14

RATIO OF DEATHS PER 1,000 OF POPULATION.

Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Injuries.	All other causes.	From all causes. For the year.	From all causes. Mean of previous five years.
.....	...	...	11·18	.....	...	·72	·36	12·26	20·33
.....	...	...	10·02	·31	5·29	·54	·54	16·57	15·34
.....	·11	...	12·26	·85	3·99	·22	14·24	31·58	38·45
.....	...	...	15·63	.....	1·58	·78	2·90	20·89	27·06
.....	...	...	27·35	·18	...	·18	1·08	29·28	30·92
.....	...	...	4·74	·45	5·20	·45	5·43	16·25	18·77
.....	·01	...	16·46	·59	3·93	1·17	3·78	26·01	22·26
.....	...	...	13·69	·81	6·28	·23	12·07	33·29	33·79
.....	...	...	21·83	1·81	7·12	·61	2·55	33·13	24·52
.....	...	...	29·17	.....	...	...	·47	29·64	36·14
.....	...	...	15·03	·38	1·74	...	2·09	19·21	17·39
·31	1·80	·17	7·41	1·50	3·16	·48	10·13	29·96	28·68
·79	1·11	·26	11·65	1·39	5·20	·40	8·73	29·53	27·15

ANNUAL FORM No. VI (*a*)—DEATHS *registered from certain* *during the*

1	2	3	4		5	
No.	Districts and Towns.	Population according to Census of 1921.	Enteric Fever.		Measles.	
			Deaths.	Ratio.	Deaths.	Ratio.
	A.—DISTRICTS (EXCLUDING TOWNS).					
	Western Registration District.					
1	East Khándesh	918,037	224	·24	256	·25
2	West Khándesh	568,809	1,139	2·00	277	·49
3	Násik	705,858	...	...	96	·14
4	Thána	694,658	876	1·26	19	·02
5	Bombay Suburban	91,943	15	·16	8	·09
6	Kolaba	583,270	694	1·30	79	·15
	Central Registration District.					
7	Ahmednagar	667,106	175	·26	120	·18
8	Poona	770,334	77	·09	110	·14
9	Sholápur	574,999	63	·11	239	·41
10	Sátára	964,847	67	·07	229	·24
11	Ratnágiri	1,083,350	77	·07	121	·11
	Southern Registration District.					
12	Belgaum	871,163	273	·31	297	·34
13	Dhárwár	870,565	307	·35	264	·30
14	Bijápur	717,798	220	·31	83	·11
15	Kánara	350,246	336	·96	20	·06
	Gujarat Registration District.					
16	Surat	526,465	...	...	67	0·13
17	Broach	243,112	...	...	176	·72
18	Kaira	604,528	...	...	328	·54
19	Panch Mahals	331,791	...	...	68	·20
20	Ahmedabad	568,759	4	·01	189	·33
	Sind Registration District.					
21	Karáchi	307,576	5	·01	1	·00
22	Hyderabad	480,469	2	·00	11	·02
23	Thar and Párkar	386,343	8	·02	1	·00
24	Nawábshah	402,915	9	·02	...	...
25	Lárkana	562,636	10	·02	...	...
26	Sukkur ... —	394,216	1	·02	23	·06
27	Upper Sind Frontier	230,036	3	·00	...	...
	Total of Districts ...	15,421,829	4,585	·29	3,082	·19

diseases in the DISTRICTS *and* TOWNS *of the* BOMBAY PRESIDENCY *year 1930.*

6		7		8		9		10	
Relapsing Fever.		Kala Azar.		Malaria.		Other Fevers.		Influenza.	
Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
...	...	...	...	257	·28	17,407	18·96	...	...
...	...	...	...	980	1·72	7,957	13·99	31	·05
...	...	...	...	2,003	2·84	8,806	12·47	...	...
...	...	...	...	1,169	1·68	4,916	7·08	4	·01
...	...	...	...	70	·76	243	2·64	1	·01
...	...	..	...	713	1·33	4,523	8·48	5	·01
...	...	...	...	1,629	2·74	3,348	5·02	...	...
...	...	...	...	3,328	4·32	6,535	8·48	...	...
...	...	...	...	373	·65	7,017	12·17	1	·00
...	...	...	...	366	·38	11,866	12·32	3	·00
...	...	...	...	118	·11	8,998	8·29	...	...
...	...	...	...	1,673	1·92	4,089	4·69	7	·01
...	...	...	...	1,262	1·45	5,815	6·68	13	·01
...	...	...	...	1,138	1·59	7,808	10·88	10	·01
...	...	...	...	836	2·39	2,291	6·54	...	...
...	...	...	...	11	·02	5,810	11·04	5	·01
...	...	...	...	1	·00	5,337	21·95	...	...
...	...	...	...	1	·00	6,200	10·26	...	...
...	...	...	...	8	·02	6,016	18·13	3	·01
...	...	...	...	87	·15	8,081	14·21	...	...
...	...	...	...	594	1·93	2,241	7·28	...	...
...	...	...	...	160	·33	4,300	8·95	...	...
...		...	...	154	·39	3,806	9·85	...	...
...		...	...	227	·56	5,068	12·58	...	...
...	...	...	...	96	·17	9,524	16·91	...	...
...	...	...	...	169	·43	7,765	19·69	...	...
...	...	...	...	392	1·70	3,997	17·38	...	...
...	...	...	...	13,015	1·18	169,764	11·01	83	·01

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No.	2 Districts and Towns.	11 Pneumonia.		12 Phthisis.		13 Other Respiratory diseases.	
		Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
	A.—DISTRICTS (EXCLUDING TOWNS).						
	Western Registration District.						
1	East Khandesh	44	·05	933	1·02	3,362	3·66
2	West Khandesh	160	·28	696	1·22	2,129	3·74
3	Nasik	469	·66	852	1·21	3,788	5·37
4	Thana	1,564	2·25	1,658	2·39	1,167	1.68
5	Bombay Suburban	214	2·33	140	1·52	234	2·55
6	Kolaba	572	1·07	1,999	3·75	1,240	2·32
	Central Registration District.						
7	Ahmednagar	40	·06	433	·65	3,909	5·86
8	Poona	67	0·03	705	·92	3,193	4·15
9	Sholapur	26	·05	309	·67	1,837	3·19
10	Satara	73	·08	916	·95	2,254	2·34
11	Ratnágiri	41	·04	2,052	1·89	1,842	1·70
	Southern Registration District.						
12	Belgaum	88	·10	743	·85	2,506	2·88
13	Dhárwár	42	·05	649	·75	2,264	2·60
14	Bijápur	5	·00	511	·71	2,083	2·90
15	Kánara	22	·06	205	·59	516	1·47
	Gujarat Registration District.						
16	Surat	1,694	3·22	445	·84	3,300	6·27
17	Broach	414	1·70	190	·78	1,315	5·41
18	Kaira	461	·76	1,056	1·75	4,466	7·39
19	Panch Maháls	95	·29	285	·86	892	2·69
20	Ahmedabad	423	·74	639	1·12	1,621	2·85
	Sind Registration District.						
21	Karáchi	576	1·89	63	·20	14	·04
22	Hyderabad	471	·98	82	·17	68	·14
23	Thar and Párkar	729	1·88	73	·19	92	·24
24	Nawábshah	406	1·01	25	·06	40	·09
25	Lárkana	168	·29	35	·07	52	·09
26	Sukkur	126	·32	25	·06	50	·12
27	Upper Sind Frontier	93	·40	2	·00	7	·03
	Total of Districts ...	9,083	·59	15,801	1·02	44,241	2·88

No. VI (*a*)—*contd.*

14 Dysentery.		15 Diarrhœa.		16	17 Deaths under 1 year.			18	19
Deaths.	Ratio.	Deaths.	Ratio.	Deaths from child birth.	Male.	Female.	Total.	Infant mortality rate per 1,000 births.	No.
191	·21	1,249	1·36	91	6,171	5,291	11,462	237·23	1
9	·02	637	1·12	40	3,440	3,068	6,508	205·92	2
161	·23	887	1·26	315	3,941	3,195	7,136	184·34	3
202	·29	605	·87	144	1,871	1,676	3,547	146·42	4
64	·70	212	2·30	13	182	151	333	166·83	
463	·87	1,005	1·90	119	2,022	1,723	3,745	168·14	6
105	·16	1,175	1·76	106	3,890	3,040	6,930	190·65	7
11	·02	1,491	1·94	128	3,205	2,626	5,831	182·20	8
6	·01	1,426	2·47	125	3,177	2,522	5,699	205·20	9
28	·03	2,354	2·44	127	4,111	3,391	7,502	182·73	10
459	·43	500	·46	300	1,978	1,697	3,675	97·07	11
234	·27	2,605	2·99	258	3,134	2,574	5,708	149·99	12
140	·16	733	·84	220	2,923	2,458	5,381	147·65	13
99	·14	1,390	1·94	134	2,695	2,284	4,979	163·02	14
144	·41	523	1·49	346	1,381	1,166	2,547	185·59	15
67	·13	192	·36	20	1,778	1,586	3,359	175·65	16
22	·09	241	·99	20	1,471	1,347	2,818	246·45	17
213	·35	391	·65	22	2,206	1,973	4,179	194·87	18
22	·07	169	·51	83	1,163	1,107	2,270	161·77	19
98	·17	211	·37	15	1,726	1,514	3,240	164·50	20
5	·01	17	·06	71	360	260	620	137·53	21
9	·02	15	·03	105	469	371	840	118·90	22
5	·01	12	·03	111	518	437	955	95·81	23
9	·02	12	·03	104	461	377	838	93·12	24
15	·03	23	·04	145	735	621	1,356	139·60	25
6	·02	46	·12	96	697	573	1,270	212·94	26
1	·00	16	·07	28	331	299	630	152·65	27
2,768	·18	18,137	1·19	3,286	56,031	47,327	103,358	173·19	

ANNUAL FORM

No.	2 Districts and Towns.	3 Population according to Census of 1921.	4 Enteric Fever. Deaths.	4 Enteric Fever. Ratio.	5 Measles. Deaths.	5 Measles. Ratio.
	B.—TOWNS.					
	East Khandesh District.					
1	Jalgaon	23,696	6	·25	9	·38
2	Bhusáwal	24,933	1	·04	27	1·08
3	Chopda	16,930	5	·30	...	...
4	Dharangaon	14,824	4	·26	3	·20
5	Parola	12,079	1	·08	19	1·57
6	Amálner	17,068	3	·17	9	·53
7	Erandol	12,489	...	...	...	...
8	Nasirabad	12,188	...	...	...	...
9	Chálisgaon	11,990	4	·33	6	·50
10	Yawal	10,888	2	·16	...	...
	West Khandesh District.					
11	Dhulia	30,061	15	·50	4	·13
12	Nandurbar	13,842	2	·14	25	1·80
	Nasik District.					
13	Násik	42,715	...	...	24	·56
14	Yeola	13,911	...	...	1	·07
15	Málegaon	23,714	...	...	1	·04
16	Igatpuri	9,977	...	...	3	·30
17	Manmad	11,866	...	...	...	...
18	Trimbak	4,538	...	...	1	·22
19	Deolali Cantonment	12,640	1	·08	...	...
	Thana District.					
20	Thána	22,116	14	·63	4	·18
21	Bhiwandi	12,188	1	·08	3	·25
22	Kalyán	17,573	46	2·62	14	·79
23	Bassein	10,364	...	...	...	...
	Bombay Suburban District.					
24	Bandra	28,738	6	·21	1	·03
25	Kurla	26,059	10	·38	15	·58
26	Santa Cruz Cantonment	4,701	...	...	...	...
	Kolaba District.					
27	Alibág	5,253	...	...	3	·57
28	Panvel	8,622	7	·81	5	·58
29	Mahád	7,192	2	·28	2	·28

No. VI (*a*)—*contd.*

6		7		8		9		10	
Relapsing Fever.		Kala Azar.		Malaria.		Other Fevers.		Influenza.	
Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
...	...	...	...	...	...	178	7·51	...	...
...	...	...	...	...	...	221	8·86	...	...
...	...	...	...	...	...	89	5·26	...	...
...	...	...	...	...	...	173	11·67	...	...
...	...	...	...	5	·41	149	12·33	...	...
...	...	...	...	...	...	179	10·49	...	...
...	...	...	...	...	...	180	14·41	...	...
...	...	...	...	...	...	318	26·09	...	...
...	...	...	...	11	·92	177	14·76	...	...
...	...	...	...	...	...	51	4·68	...	...
...	...	...	...	5	·17	106	3·52	...	...
...	...	...	...	1	·07	178	12·86	1	·07
...	...	...	...	43	1·01	119	2·79	...	...
...	...	...	...	...	...	255	18·34	...	...
...	...	...	...	71	2·99	116	4·89	...	...
...	...	...	...	...	...	73	7·32	...	...
...	...	...	...	1	·08	43	3·62	...	...
...	...	...	...	...	...	31	6·83	...	...
...	...	...	...	2	·16	2	·16	...	...
...	...	...	...	10	·45	56	2·53	1	·05
...	...	...	...	18	1·48	47	3·85	...	...
...	...	...	...	1	·06	6	·34	...	...
...	...	...	...	8	·77	11	1·06	...	...
...	...	...	...	7	·24	30	1·04	...	...
...	...	...	...	22	·84	97	3·72	...	...
...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	34	6·48	...	...
...	...	...	...	12	1·39	...	...	...	...
...	...	...	...	6	·88	14	1·95	...	...

ANNUAL FORM

1	2	11		12		13	
		Pneumonia.		Phthisis.		Other Respiratory diseases.	
No.	Districts and Towns.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
	B.—TOWNS.						
	East Khandesh District.						
1	Jalgaon	11	·46	42	1·77	78	3·29
2	Bhusáwal	31	1·24	16	·64	25	1·00
3	Chopda	2	·12	4	·24	29	1·71
4	Dharangaon	...	...	65	4·38	36	2·43
5	Parola	1	·08	6	·49	70	5·79
6	Amálner	8	·47	9	·53	87	5·09
7	Erandol	...	...	16	1·28	36	2·88
8	Nasirabad	...	...	...	...	116	9·52
9	Chálisgaon	2	·17	48	4·00	14	1·17
10	Yawal	...	...	4	·37	33	3·03
	West Khandesh District.						
11	Dhulia	68	2·27	56	1·86	81	2·69
12	Nandurbar	3	·21	32	2·31	82	5·92
	Nasik District.						
13	Násik	223	5·22	110	2·58	116	2·71
14	Yeola	1	·07	22	1·58	92	6·61
15	Málegaon	5	·21	32	1·35	63	2·66
16	Igatpuri	8	·80	4	·40	14	1·40
17	Manmad	4	·34	15	1·26	37	3·12
18	Trimbak	3	·66	1	·22	16	3·53
19	Deolali Cantonment	10	·79	1	·08	14	1·11
	Thana District.						
20	Thána	55	2·49	41	1·85	77	3·48
21	Bhiwandi	30	2·46	30	2·46	29	2·38
22	Kalyán	26	1·48	38	2·16	73	4·15
23	Basscin	39	3·76	16	1·55	2	·19
	Bombay Suburban District.						
24	Bandra	54	1·88	14	·49	19	·66
25	Kurla	21	·81	...	...	85	3·26
26	Santa Cruz Cantonment	...	...	...	...	...	...
	Kolaba District.						
27	Alibág	...	...	11	2·09	2	·38
28	Panvel	26	3·09	37	4·29	18	2·09
29	Mahád	3	·42	15	2·09	4	·55

No. VI (*a*)—*contd.*

14		15		16	17			18	19
Dysentery.		Diarrhœa.			Deaths under 1 year.				
Deaths.	Ratio.	Deaths.	Ratio.	Deaths from child birth.	Male.	Female.	Total.	Infant mortality rate per 1,000 births.	No.
1	·04	56	2·36	1	105	63	168	243·48	1
2	·08	8	·32	1	103	67	170	261·54	2
3	·18	7	·41	1	40	45	85	202·86	3
...	...	45	3·03	1	99	85	184	327·40	4
...	...	20	1·65	...	57	58	115	253·76	5
2	·12	6	·34	1	64	45	109	230·44	6
...	...	18	1·44	...	84	69	153	306·00	7
...	...	43	3·53	1	103	79	182	298·35	8
...	...	12	1·00	...	65	56	121	256·90	9
1	·09	3	·27	1	10	6	16	108·11	10
...	...	49	1·63	6	140	112	252	187·77	11
...	...	29	2·10	4	68	73	141	191·84	12
32	·98	36	·84	31	191	171	362	292·17	13
3	·22	2	·14	13	66	50	116	351·51	14
1	·04	63	2·66	19	96	78	174	246·11	15
...	...	5	·50	9	19	14	33	178·38	16
1	·08	6	·51	5	18	17	35	161·29	17
1	·22	2	·44	2	15	15	30	173·41	18
1	·08	5	·40	1	6	2	8	296·30	19
1	·05	38	1·72	4	60	45	105	257·98	20
4	·33	39	3·20	...	45	43	88	226·80	21
8	·46	10	·57	6	34	28	62	152·33	22
6	·58	13	1·25	3	8	7	15	78·53	23
32	1·11	31	1·08	2	67	53	120	167·60	24
66	2·53	8	·31	10	99	83	182	248·29	25
...	...	...	...	...	...	1	1	200·00	26
1	·19	5	·95	...	11	5	16	88·88	27
3	·93	1	·12	...	6	3	9	43·90	28
4	·55	...	...	...	12	6	18	140·62	29

1	2	3	4		5	
			Enteric Fever.		Measles.	
No.	Districts and Towns.	Population according to Census of 1921.	Deaths.	Ratio.	Deaths.	Ratio.
	B.—TOWNS—*contd.*					
	Kolaba District—contd.					
30	Uran	8,135	...	...	...	...
31	City of Bombay	1,148,815	178	·15	134	·12
	Ahmednagar District.					
32	Ahmednagar	33,138	15	·45	15	·45
33	Sangamner	12,737	4	·31	...	...
34	Ahmednagar Cantonment	10,997	...	...	1	·07
	Poona District.					
35	Poona City	133,122	94	0·71	96	·72
36	Poona Suburban	13,971	...	...	...	...
37	Baramati	11,905	1	·08	2	·17
38	Khed	7,013	...	...	1	·14
39	Lonávla	10,471	...	...	...	...
40	Junnar	7,376	....	...	5	·68
41	Poona Cantonment	25,498	2	0·08	1	·04
42	Kirkee do.	7,991	3	0·38	...	...
	Sholapur District.					
43	Sholápur	119,347	12	·10	334	2·80
44	Bársi	22,074	2	·09	14	·63
45	Pandharpur	25,210	7	·28	29	1·15
	Satara District.					
46	Sátára	22,454	1	·04	15	·67
47	Wái	10,208	9	·88	10	·98
48	Karád	11,255	1	·09	4	·36
49	Ashta	9,016	...	...	...	...
50	Islámpur	7,915	1	·13	...	...
	Ratnagiri District.					
51	Ratnágiri	18,286	2	·11	1	·05
52	Vengurla	19,126	5	·26	4	·21
53	Málwan	22,213	...	...	4	·18
54	Chiplun	11,005	4	·36	1	·09
	Belgaum District.					
55	Belgaum	35,214	12	·33	41	1·13
56	Gokák	9,989	6	·60	1	·10
57	Athni	13,588	...	...	...	...
58	Nipáni	1,878	4	·34	...	...
59	Belgaum Cantonment	6,880	1	·15	1	·15

No. VI (*a*)—*contd.*

6 Relapsing Fever.		7 Kala Azar.		8 Malaria.		9 Other Fevers.		10 Influenza.	
Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
...	...	...	...	...	...	41	5·04	...	...
...	...	...	...	187	·16	1,754	1·53	75	·07
...	...	...	...	26	·78	72	2·17	1	·03
...	...	...	...	26	2·04	4	·31	...	...
...	...	...	...	9	·82	51	4·64	...	...
...	...	...	...	296	2·23	962	7·24	...	...
...	...	...	...	31	2·21	81	5·80	...	...
...	...	...	...	2	·17	97	8·15	...	...
...	...	...	...	3	·43	19	2·71	...	...
...	...	...	...	27	2·58	63	6·02	...	...
...	...	..	...	13	1·76	23	3·12	...	...
...	...	...	...	13	·51	24	·94	...	...
...	...	...	...	3	·38	12	1·50	...	...
...	...	...	...	...	...	2,129	17·76	...	...
...	...	...	...	...	...	407	18·44	...	...
...	...	...	...	4	·16	322	12·77	...	...
...	...	...	...	4	·18	155	8·90	1	·04
...	...	...	...	1	·10	42	4·11	...	...
...	...	...	...	2	·18	45	4·00	...	...
...	...	...	...	...	...	40	4·44	...	...
...	...	...	...	...	...	55	6·95	...	...
...	...	...	...	...	...	72	3·94	...	...
...	...	...	...	9	·47	71	3·71	...	...
...	...	...	...	2	·09	67	3·02	...	...
...	...	...	...	...	...	80	7·27	...	...
...	...	...	...	9	·25	169	4·67	1	·03
...	...	...	...	3	·30	50	5·01	...	...
...	...	...	...	7	·52	63	4·65	...	...
...	...	...	...	10	·84	84	7·07	...	...
...	...	...	...	1	·15	18	2·62	1	·15

ANNUAL FORM

1	2	11		12		13	
No.	Districts and Towns.	Pneumonia.		Phthisis.		Other Respiratory diseases.	
		Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
	B.—TOWNS—*contd.*						
	Kolaba District—contd.						
30	Uran	2	·25	6	·74	1	·12
31	City of Bombay	7,690	6·69	1,440	1·25	1,981	1·72
	Ahmednagar District.						
32	Ahmednagar	161	4·86	91	2·76	119	3·59
33	Sangamner	...	...	17	1·34	27	2·12
34	Ahmednagar Cantonment	10	·91	6	·55	65	5·91
	Poona District.						
35	Poona City	621	4·67	481	3·62	322	2·42
36	Poona Suburban	7	·51	8	·57	14	1·00
37	Baramati	10	·84	19	1·60	25	2·10
38	Khed	1	·14	5	·71	33	4·71
39	Lonávla	29	2·78	15	1·43	36	3·44
40	Junnar	1	·14	25	3·39	35	4·75
41	Poona Cantonment	40	1·57	34	1·33	49	1·92
42	Kirkee do.	28	3·50	16	2·00	21	2·62
	Sholapur District.						
43	Sholapur	59	·49	168	1·41	321	2·69
44	Bársi	2	·09	11	·50	31	1·40
45	Pandharpur	30	1·19	56	2·22	177	7·02
	Satara District.						
46	Sátára	12	·54	62	2·76	61	2·72
47	Wái	3	·29	15	1·47	14	1·37
48	Karád	2	·18	13	1·16	24	2·13
49	Ashta	3	·33	5	·55	12	1·33
50	Islámpur	2	·25	9	1·13	50	6·32
	Ratnagiri District.						
51	Ratnágiri	6	·33	33	1·80	7	·38
52	Vengurla	14	·73	26	1·36	39	2·04
53	Málwan	5	·22	18	·81	32	1·44
54	Chiplun	1	·09	40	3·64	12	1·09
	Belgaum District.						
55	Belgaum	41	1·13	144	3·98	60	1·66
56	Gokák	...	...	14	1·40	12	1·20
57	Athni	...	...	6	·44	34	2·51
58	Nipáni	1	·08	13	1·09	51	4·29
59	Belgaum Cantonment	3	·44	2	·29	3	·44

No. VI (*a*)—*contd.*

14		15		16	17			18	19
Dysentery.		Diarrhœa.		Deaths from child birth.	Deaths under 1 year.			Infant mortality rate per 1,000 births.	No.
Deaths.	Ratio.	Deaths.	Ratio.		Male.	Female.	Total.		
3	·37	8	·98	3	8	9	17	191·01	30
492	·42	970	·84	186	4,037	3,435	7,472	298·33	31
5	·15	89	2·69	17	126	92	218	147·69	32
...	...	13	1·02	...	25	14	39	135·42	33
4	·36	7	·64	3	26	17	43	147·76	34
7	·05	310	2·33	49	1,003	894	1,897	350·90	35
...	...	17	1·22	2	29	29	58	522·52	36
...	...	38	3·19	...	46	33	79	217·63	37
...	...	...	...	...	11	7	18	87·80	38
1	·09	10	·95	1	22	15	37	160·48	39
...	...	3	·41	1	9	13	22	94·01	40
21	·82	9	·35	2	23	18	41	179·82	41
1	·12	29	3·63	...	31	22	53	251·18	42
6	·05	520	4·36	56	586	492	1,080	212·10	43
...	...	37	1·68	...	152	136	288	407·36	44
6	·24	71	2·82	20	235	188	423	421·31	45
1	·04	19	·85	16	80	74	154	380·25	46
...	...	11	1·08	1	19	11	30	108·30	47
...	...	14	1·24	8	21	9	30	135·75	48
...	...	13	1·44	3	13	6	19	74·21	49
...	...	8	1·01	1	15	12	27	128·57	50
59	2·74	11	·60	11	21	17	38	82·07	51
8	·42	5	·26	6	33	41	74	129·14	52
1	·04	3	·14	6	24	18	42	78·80	53
3	·27	1	·09	6	9	7	16	71·75	54
4	·11	90	2·49	1	116	87	203	185·90	55
1	·10	24	2·40	2	17	18	35	100·00	56
5	·37	2	·15	...	12	11	23	68·05	57
1	·08	21	1·75	3	13	12	25	67·57	58
...	...	...	...	...	3	9	12	136·36	59

ANNUAL FORM

1	2	3	4		5	
No.	Districts and Towns.	Population according to Census of 1921.	Enteric Fever.		Measles.	
			Deaths.	Ratio.	Deaths.	Ratio.
	B.—TOWNS—*contd.*					
	Dharwar District.					
60	Dhárwár	34,327	19	·55	41	1·19
61	Hubli	69,140	29	·42	73	1·06
62	Gadag-Bettigeri	41,158	10	·24	65	1·58
63	Ránebennur	13,930	5	·36	15	1·08
64	Nawalgund	7,089	...	...	...	...
	Bijapur District.					
65	Bijápur	32,471	16	·49	1	·03
66	Bágalkot	19,471	8	·41	7	·36
67	Guledgud	14,760	...	...	...	...
68	Ilkal	11,856	12	1·01	34	2·87
	Kanara District.					
69	Kárwár	14,463	4	·28	6	·41
70	Kumta	14,291	6	·42	...	...
71	Gokarn	8,307	31	3·73	...	...
72	Honáwar	7,035	...	...	...	...
73	Bhatkal	7,134	...	...	1	·14
	Surat District.					
74	Surat	117,428	22	·19	101	·86
75	Bulsar	19,681	3	·15	2	·10
76	Ránder	10,547	...	...	38	3·60
	Broach District.					
77	Broach	42,626	...	...	1	·02
78	Jambusar	10,217	...	...	53	5·19
79	Ankleshwar	11,756	...	...	16	1·36
	Kaira District.					
80	Kaira	8,277	...	...	4	·48
81	Mehmodabad	6,236	...	...	15	2·41
82	Nadiád	31,919	...	...	27	·85
83	Borsad	12,113	...	...	23	1·90
84	Anand	11,024	...	...	1	·09
85	Umreth	14,024	2	·14	59	4·21
86	Dákore	7,990	...	...	32	4·00
87	Kapadvanj	14,794	...	...	48	3·24

No. VI (*a*)—*contd.*

6 Relapsing Fever.		7 Kala Azar.		8 Malaria.		9 Other Fevers.		10 Influenza.	
Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
...	...	...	...	24	·70	109	3·18	1	·03
...	...	...	...	48	·69	157	2·27	6	·09
...	...	...	...	12	·29	390	9·48	...	...
...	...	...	...	6	·44	46	3·30	...	...
...	...	...	...	...	...	30	4·23	...	...
...	...	...	...	66	2·03	110	3·39	...	...
...	...	...	...	7	·36	114	5·85	...	...
...	...	...	...	2	·14	109	7·38	1	·07
...	...	...	...	38	3·21	56	4·72	...	...
...	...	...	..	27	1·87	2	·14	...	...
...	...	...	...	3	·21	74	5·18	...	...
...	...	...	...	...	...	37	4·45	...	...
...	...	...	...	...	...	35	4·98	...	...
...	...	...	...	...	...	61	8·55	...	...
...	...	...	...	511	4·35	147	1·25	...	...
...	...	...	...	...	...	27	1·37	...	...
...	...	...	...	...	...	114	10·81	...	...
...	...	...	...	5	·12	220	5·16	...	...
...	...	...	...	117	11·45	1	·10	...	...
...	...	...	...	...	...	250	21·27	...	...
...	...	...	..	...	...	60	7·25	...	...
...	...	...	...	...	...	115	18·44	...	...
...	...	...	...	...	...	528	16·54	...	...
...	...	...	...	...	...	247	20·39	...	...
...	...	...	...	...	...	204	18·51	...	...
...	...	...	...	81	5·78	124	8·84	...	...
...	...	...	...	1	·13	136	17·02	2	·25
...	...	...	...	1	·07	297	20·07	...	...

ANNUAL FORM

1	2	11		12		13	
		Pneumonia.		Phthisis.		Other Respiratory diseases.	
No.	Districts and Towns	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
	B.—TOWNS—*contd.*						
	Dharwar District.						
60	Dhárwár	22	·64	41	1·19	112	3·26
61	Hubli	13	·19	125	1·81	76	1·10
62	Gadag-Bettigeri	24	·58	71	1·53	244	5·93
63	Ranebennur	4	·29	30	2·15	53	3·80
64	Nawalgund	...	...	15	2·12	13	1·83
	Bijapur District.						
65	Bijápur	16	·49	35	1·08	84	2·59
66	Bágalkot	2	·10	29	1·49	63	3·24
67	Guledgud	6	·40	37	2·51	38	2·57
68	Ilkal	...	...	41	3·46	33	2·78
	Kanara District.						
69	Kárwar	...	...	10	·70	6	·41
70	Kumta	...	...	8	·56	19	1·33
71	Gokarn	6	·72	19	2·29	5	·60
72	Honáwar	...	...	3	·42	2	·28
73	Bhatkal	...	...	5	·70	14	1·96
	Surat District.						
74	Surat	737	6·28	306	2·61	444	3·78
75	Bulsar	104	5·28	12	·62	26	1·32
76	Ránder	9	·85	46	4·36	28	2·65
	Broach District.						
77	Broach	37	·87	28	·66	160	3·75
78	Jambusar	11	1·08	15	1·47	70	6·85
79	Ankleshwar	10	·85	15	1·28	60	5·10
	Kaira District.						
80	Kaira	3	·36	18	2·18	47	5·68
81	Mehmedabad	2	·33	25	4·01	9	1·44
82	Nadiád	113	3·54	74	2·32	62	1·94
83	Borsad	2	·17	6	·49	21	1·73
84	Anand	7	·63	5	·45	22	2·00
85	Umreth	1	·07	15	1·07	183	13·05
86	Dakore ...	15	1·88	16	2·00	59	7·38
87	Kapadvanj	18	1·22	35	2·37	18	1·22

No. VI (*a*)—*contd.*

14		15		16	17			18	19
Dysentery.		Diarrhœa.		Deaths from child birth.	Deaths under 1 year.			Infant mortality rate per 1,000 births.	No.
Deaths.	Ratio.	Deaths.	Ratio.		Male	Female.	Total		
3	·09	61	1·78	1	98	59	157	121·42	60
2	·03	45	·65	6	92	78	170	81·42	61
8	·19	42	1·02	3	177	161	338	205·72	62
...	...	21	1·51	3	53	45	98	145·19	63
...	...	9	1·27	...	20	16	36	171 43	64
5	·15	23	·71	1	93	77	170	147·31	65
...	...	28	1·44	7	76	56	132	179·59	66
...	...	2	·11	8	76	79	155	250·00	67
...	..	1	·08	...	81	60	141	299·36	68
20	1·40	4	·28	3	7	8	15	43·86	69
1	·07	21	1·47	1	19	16	35	118·64	70
...	...	10	1·20	2	6	7	13	53·33	71
1	·14	11	1·56	3	8	9	17	72·34	72
...	...	5	·70	5	15	5	20	78·74	73
41	·35	248	2·11	66	943	914	1,857	370·43	74
5	·26	2	·10	4	65	63	128	216·58	75
4	·38	...	...	8	35	30	65	138·69	76
18	·31	14	·33	32	198	199	397	200·81	77
...	...	7	·69	...	61	59	120	224·30	78
...	...	1	·08	...	78	77	155	329·09	79
1	·12	8	·97	...	33	29	62	212·33	80
...	...	9	1·44	...	46	51	97	322·26	81
10	·31	12	·38	13	209	206	415	308·09	82
34	2·81	6	·49	3	74	84	158	215·26	83
4	·36	...	...	...	46	26	72	241·61	84
4	·28	3	·14	...	100	75	175	255·10	85
4	·50	11	1·88	2	50	59	109	432·54	86
2	·13	10	·68	...	96	80	176	272·02	87

1	2	3	4		5	
			Enteric Fever.		Measles.	
No.	Districts and Towns.	Population according to Census of 1921.	Deaths.	Ratio.	Deaths.	Ratio.
	B.—TOWNS—*contd.*					
	Panch Mahals District					
88	Godhra	26,969	...	...	21	·78
89	Dohad	16,071	...	...	38	2·37
	Ahmedabad District.					
90	Ahmedabad	270,599	...	...	124	·46
91	Dhandhuka	8,056	...	...	10	1·24
92	Viramgaon ...	26,252	...	...	3	·12
93	Dholka	12,513	...	...	15	1·20
94	Ahmedabad Cantonment	1,745	...	...	...	...
	Karachi District.					
95	Karáchi	199,014	32	·16	13	·07
96	Tatta	8,470	...	...	1	·11
97	Kotri	9,072	3	·33	1	·11
98	Karáchi Cantonment	6,525	...	...	...	...
	Hyderabad District.					
99	Hyderabad	72,625	47	·64	35	·48
100	Halla	5,757	...	...	...	...
101	Matiari	4,638	...	...	...	...
102	Hyderabad Cantonment	3,760	...	...	1	·27
	Thar and Parkar District.					
103	Umarkot	4,199	...	...	...	...
104	Mirpurkhas	5,765	...	...	...	...
	Nawabshah District.					
105	Nawábsháh	2,771	...	...	...	...
106	Tando Adam	12,966	3	·23	...	...
	Larkana District.					
107	Lárkána	17,700	27	1·52	...	...
108	Kambar	7,613	16	2·11	...	...
109	Ratodero	5,565	...	...	...	...
110	Sehwan	4,423	2	·45	...	...

No. VI (*a*)—*contd.*

6		7		8		9		10	
Relapsing Fever.		Kala Azar.		Malaria.		Other Fevers.		Influenza.	
Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
...	...	...	...	...	...	542	20·10	...	...
...	...	...	...	...	...	323	20·10	...	...
...	...	...	...	24	·09	4,139	15·29	3	·01
...	...	...	...	...	...	77	9·56	...	...
...	...	...	...	...	...	412	15·69	...	...
...	...	...	...	83	6·63	96	7·67	...	...
...	...	...	...	...	...	12	6·88	...	...
...	...	...	...	26	·13	487	2·49	6	·03
...	...	...	...	...	...	41	4·84	...	...
...	...	...	...	49	5·40	2	·22	...	...
...	...	...	...	...	...	31	4·75	...	...
...	...	...	...	159	2·19	23	·32	...	...
...	...	...	...	...	...	39	6·77	...	...
...	...	...	...	...	...	51	10·99	...	...
...	...	...	...	...	...	18	4·78	...	...
...	...	...	...	24	5·72	9	2·14	...	...
...	...	...	...	7	1·21	30	5·20	...	...
...	...	...	...	...	...	31	11·18	...	...
...	...	...	...	127	9·79	...	...	...	...
...	...	...	...	190	10·74	...	...	...	...
...	...	...	...	1	·03	102	13·39	...	...
...	...	...	...	...	...	155	27·85	...	...
...	...	...	...	19	4·29	...	...	...	...

ANNUAL FORM

1	2	11		12		13	
		Pneumonia.		Phthisis.		Other Respiratory Diseases.	
No.	Districts and Towns.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
	B—TOWNS—*continued.*						
	Panch Mahals District.						
88	Godhra	6	·22	6	·22	24	·89
89	Dohad	1	·06	5	·31	...	...
	Ahmedabad District.						
90	Ahmedabad	354	1·31	856	3·16	2,619	9·68
91	Dhandhuka	12	1·49	16	1·99	69	8·57
92	Viramgaon	62	2·36	40	1·53	222	8·45
93	Dholka	15	1·20	16	1·28	31	2·48
94	Ahmedabad Cantonment	4	2·29	1	·57	7	4·01
	Karachi District.						
95	Karachi	1,155	5·80	542	2·72	509	2·56
96	Tatta	36	4·38	12	1·38	13	1·49
97	Kotri	16	1·65	5	·55	4	·44
98	Karachi Cantonment	7	1·07	...	...	...	...
	Hyderabad District.						
99	Hyderabad	550	7·57	176	2·42	135	1·86
100	Halla	7	1·22	3	·52	2	·35
101	Matiari	18	3·88	5	1·08	2	·43
102	Hyderabad Cantonment	1	·27	...	...	...	...
	Thar and Parkar District.						
103	Umarkot	27	6·48	4	·95	1	·24
104	Mirpurkhas	23	4·00	7	1·21	10	1·74
	Nawabshah District.						
105	Nawábsháh	...	...	...	...	...	...
106	Tando Adam	38	2·93	5	·38	24	1·85
	Larkana District.						
107	Lárkána	53	2·99	16	·91	...	...
108	Kambar	5	·66	5	·66	2	·26
109	Ratodero	...	...	...	...	...	...
110	Sehwan	14	3·17	9	2·03	...	...

No. VI (a)—*contd.*

14		15		16	17			18	19
Dysentery.		Diarrhœa.		Deaths from child birth.	Deaths under 1 year.			Infant mortality rate per 1,000 births.	No.
Deaths.	Ratio.	Deaths.	Ratio.		Male.	Female.	Total.		
2	·07	19	·70	1	114	118	232	245·76	88
5	·31	31	1·31	13	70	61	131	218·70	89
117	·43	265	·98	260	2,627	2,434	5,061	356·18	90
1	·12	13	1·61	...	46	31	77	195·43	91
6	·23	7	·27	19	129	137	266	366·89	92
3	·24	5	·40	...	72	56	128	202·53	93
5	2·86	1	·57	...	2	4	6	214·29	94
85	·42	375	1·89	86	1,089	911	2,000	193·42	95
...	...	2	·23	6	11	12	23	178·29	96
2	·22	12	1·32	5	11	12	23	205·35	97
1	·15	1	·15	...	16	17	33	123·59	98
22	·30	41	·57	34	353	319	672	229·91	99
...	...	...	...	3	11	7	18	162·16	100
...	...	...	...	...	1	6	7	84·34	101
...	...	...	...	...	2	4	6	187·50	102
1	·24	...	...	...	6	3	9	108·48	103
1	·17	1	·17	6	7	...	7	72·91	104
...	...	...	...	1	...	...	...	...	105
3	·23	1	·08	7	26	25	51	160·87	106
8	·45	7	·40	42	82	63	145	236·15	107
...	...	...	...	9	16	15	31	158·97	108
...	...	1	·00	6	17	11	28	218·75	109
...	...	2	·45	4	10	2	12	196·72	110

ANNUAL FORM

1	2	3	4		5	
			Enteric Fever.		Measles.	
No.	Districts and Towns.	Population according to Census of 1921.	Deaths.	Ratio.	Deaths.	Ratio.
	B—TOWNS—*concld.*					
	Sukkur District.					
111	Sukkur	42,046	3	·06	2	·04
112	Shikárpur	55,347	274	4·95	17	·31
113	Rohri	11,378	5	·43	...	...
114	Garhi Yasin	6,375	...	...	...	...
	Upper Sind Frontier District.					
115	Jacobabad	10,578	...	...	...	...
	Total of Towns ...	3,743,785	1,073	·29	1,837	·49
	Total for the Presidency ...	19,165,614	5,658	·30	4,919	·26

No. VI *(a)—contd.*

6 Relapsing Fever.		7 Kala Azar.		8 Malaria.		9 Other Fevers.		10 Influenza.	
Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
...	...	...	...	2	·01	685	16·29	...	...
...	...	...	...	293	5·29	185	3·34	...	...
...	...	...	....	240	21·10	...	...	...	...
...	...	...	...	...	...	186	29·17	...	...
...	...	...	...	...	...	159	15·03	...	...
...	...	...	....	3,104	·84	21,531	5·78	100	·02
...	...	...	....	21,119	1·10	191,395	9·99	188	·01

ANNUAL FORM

1	2	11		12		13	
		Pneumonia.		Phthisis.		Other Respiratory Diseases.	
No.	Districts and Towns.	Deaths.	Ratio.	Deaths.	Ratio.	Deaths.	Ratio.
	B.—TOWNS—*concluded.*						
	Sukkur District.						
111	Sukkur	116	2·75	24	·57	25	·59
112	Shikárpur	115	2·03	148	3·67	85	1·53
113	Rohri	48	4·24	13	1·14	20	1·74
114	Gárhi Yasin	...	...	..	...	...	...
	Upper Sind Frontier District.						
115	Jacobabad	18	1·71	...	...	...	...
	Total of Towns ...	13,280	3·56	6,462	1·73	10,791	2·88
	Total for the Presidency ...	22,363	1·17	22,283	1·16	55,032	2·87

No. VI (*a*)—*concld.*

14		15		16	17			18	19
Dysentery.		Diarrhœa.		Deaths from child birth.	Deaths under 1 year.			Infant mortality rate per 1,000 births.	No.
Deaths.	Ratio.	Deaths.	Ratio.		Male.	Female.	Total.		
6	·12	19	·47	38	127	82	209	208·37	191
7	·13	38	·68	59	237	201	438	279·69	112
...	...	15	1·31	18	36	34	70	300·43	113
...	...	...	...	2	21	13	34	133·33	114
1	·09	3	·29	...	14	15	29	258·93	115
1,236	·33	4,375	1·18	1,315	16,466	14,346	30,812	256·43	
4,024	·21	22,512	1·17	4,601	72,497	61,673	134,170	187·14	

ANNUAL FORM No. VII.—DEATHS *registered from* *during each month*

1	2	3		4		5					
		Circles of Registration.		Villages.							
No.	Districts.	Number in each District.	Number from which deaths from cholera were reported.	Number in each District.	Number from which deaths from cholera were reported.	January.	February.	March.	April.	May.	June.
	Western Registration District.										
1	East Khandesh ...	23	23	1,478	203	15	...	...	...	...	...
2	West Khandesh ...	10	10	1,242	137	1	...	...	14	...	...
3	Nasik	19	17	1,667	163	...	15	8	4	...	...
4	Thana	19	7	1,546	16	...	...	2	...	...	...
5	Bombay Suburban ...	5	...	86	...	...	...	...	...	...	...
6	Kolaba	13	5	1,482	27	...	...	...	...	..	...
7	City of Bombay ...	1	1	1	1	...	...	...	...	...	...
	Central Registration District.										
8	Ahmednagar ...	15	15	1,346	214	...	4	...	...	...	...
9	Poona	20	18	1,157	206	...	...	...	...	1	...
10	Sholapur	10	10	719	275	16	...	...	1	...	...
11	Satara	18	18	1,341	424	...	...	...	...	...	...
12	Ratnagiri	15	3	1,305	9	...	...	...	...	...	...
	Southern Registration District.										
13	Belgaum	15	12	1,069	86	...	...	...	2	...	...
14	Dharwar	18	3	1,277	12	...	...	...	...	...	11
15	Bijapur	13	11	1,128	201	...	...	...	...	...	9
16	Kanara	16	...	1,264	...	...	...	...	...	...	...
	Gujarat Registration District.										
17	Surat ...	12	2	792	2	...	...	...	...	...	...
18	Broach	9	...	404	...	...	...	...	...	...	...
19	Kaira	15	3	579	3	...	...	...	...	...	...
20	Panch Mahals ...	7	4	668	27	...	...	...	...	...	12
21	Ahmedabad ...	13	1	871	1	...	...	...	...	...	...
	Sind Registration District.										
22	Karachi	16	...	793	...	...	...	...	...	...	...
23	Hyderabad ...	11	...	862	...	...	...	...	...	...	...
24	Thar and Parkar ...	13	...	904	...	...	...	...	...	...	...
25	Nawabshah ...	9	...	731	...	...	...	...	...	...	...
26	Larkana	15	...	763	...	...	...	...	...	...	...
27	Sukkur	12	...	671	...	...	...	...	...	...	...
28	Upper Sind Frontier .	6	...	410	...	...	...	...	...	...	...
	Total for the Presidency ...	368	163	26,546	2,012	32	19	10	21	1	23

CHOLERA *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *of the year 1930.*

July.	August.	September.	October.	November.	December.	6 Total. Male.	Female.	Total.	7 Ratio of Deaths per 1,000 of Population. Male.	Female.	Total	8 Mean ratio per 1,000 of previous five years.	9 No.
84	590	633	245	19	3	729	860	1,589	1·34	1·64	1·48	·74	1
4	189	297	248	61	120	462	472	934	1·49	1·56	1·52	·24	2
51	329	421	247	143	67	593	692	1,285	1·42	1·70	1·56	·84	3
...	3	22	18	14	1	29	31	60	·07	·08	·08	·06	4
...	...	...	...	...	...	...	...	...	...	...	...	·08	5
...	...	...	14	82	46	73	69	142	·26	·24	·25	·12	6
...	8	5	21	2	4	32	8	40	·04	·02	·03	·02	7
65	162	370	189	105	46	462	479	941	1·27	1·33	1·30	0·49	8
33	259	319	435	270	82	723	676	1,399	1·55	1·89	1·42	0·44	9
185	714	999	433	135	14	1,342	1,155	2,497	3·50	3·21	3·36	1·18	10
57	383	1,289	1,310	543	318	1,988	1,862	3,800	3·80	3·62	3·71	1·12	11
...	...	...	...	36	19	28	27	55	0·05	0·04	0·05	0·01	12
...	4	202	173	140	72	304	289	593	·63	·62	·62	1·61	13
37	38	4	...	...	...	68	72	140	·13	·14	·14	·70	14
5	33	354	428	444	109	736	637	1,373	1·82	1·63	1·72	·70	15
...	..	...	...	...	...	...	...	...	...	...	...	·11	16
...	...	10	8	...	...	8	10	18	·02	·03	·02	·02	17
...	...	...	...	...	...	...	...	...	...	...	...	...	18
6	29	1	...	...	...	14	22	36	·04	·07	·05	...	19
34	155	38	...	...	...	119	120	239	·62	·66	·64	·01	20
...	...	...	...	...	1	1	...	1	·00	...	·00	·02	21
...	...	...	...	...	...	...	...	...	...	...	...	·51	22
...	...	...	...	...	...	...	...	...	...	...	...	·08	23
...	...	...	...	...	...	...	...	...	...	...	...	·03	24
...	...	...	...	...	...	...	...	...	...	...	...	·12	25
...	...	...	...	...	...	...	...	...	...	...	...	1·31	26
...	...	...	...	...	...	...	...	...	...	...	...	·31	27
...	...	...	...	...	...	...	...	...	...	...	...	·16	28
611	2,896	4,964	3,769	1,994	802	7,661	7,481	15,142	·76	·82	·79	·44	

ANNUAL FORM No. VIII.—DEATHS *registered from during each month*

1	2	3		4							5
		Circles of Registration.		Villages.							
No.	Districts.	Number in each District.	Number from which deaths from Small-pox were reported.	Number in each District.	Number from which deaths from Small-pox were reported.	January.	February.	March.	April.	May.	June.
	Western Registration District.										
1	East Khandesh ...	23	23	1,478	876	1,085	1,972	1,493	728	257	56
2	West Khandesh ...	16	10	1,242	547	297	548	656	517	290	99
3	Nasik	19	17	1,667	180	133	135	147	135	89	43
4	Thana	19	16	1,546	172	54	105	120	115	57	40
5	Bombay Suburban ...	5	3	86	12	3	11	7	7	5	1
6	Kolaba	13	13	1,482	169	50	53	87	109	70	35
7	City of Bombay ...	1	1	1	1	133	306	537	360	192	89
	Central Registration District.										
8	Ahmednagar ...	15	14	1,346	146	37	60	94	39	45	28
9	Poona	20	17	1,157	172	400	469	278	108	74	27
10	Sholapur	10	10	719	93	37	35	42	56	29	38
11	Satara	18	16	1,341	144	45	83	120	96	49	38
12	Ratnagiri	15	11	1,305	143	23	35	68	80	47	33
	Southern Registration District.										
13	Belgaum	15	13	1,069	105	35	50	45	63	43	45
14	Dharwar	18	17	1,277	109	23	44	78	39	32	30
15	Bijapur	13	13	1,123	132	38	74	66	58	45	37
16	Kanara	16	11	1,264	34	7	24	21	26	13	14
	Gujarat Registration District.										
17	Surat	12	12	782	168	287	433	340	188	53	12
18	Broach	9	9	404	136	86	204	248	233	110	34
19	Kaira	15	14	579	128	264	250	192	112	34	4
20	Panch Mahals ...	7	7	668	79	56	69	105	120	48	3
21	Ahmedabad ...	13	12	871	174	500	474	351	182	65	15
	Sind Registration District.										
22	Karachi	16	6	793	13	11	22	28	41	8	3
23	Hyderabad ...	11	5	852	11	10	10	30	35	33	20
24	Thar and Parkar ...	13	5	994	26	13	13	8	12	11	4
25	Nawabshah ...	9	4	731	22	6	26	4	4	8	8
26	Larkana	15	7	763	13	4	3	4	1	11	6
27	Sukkur	12	2	671	2	...	5	2	1	2	...
28	Upper Sind Frontier.	6	1	410	1	...	...	...	...	...	1
	Total for the Presidency ...	368	289	26,546	3,808	3,651	5,513	5,166	3,460	1,720	763

N.B.—Small-pox should not include Measles, Chicken-pox, etc.

SMALL-POX *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *of the year 1930.*

July.	August.	September.	October.	November.	December.	6 Total. Male.	6 Total. Female.	6 Total. Total.	7 Number of these Deaths among Children. Under 1 year.	7 Number of these Deaths among Children. Under 10 years.	8 Total ratio of Deaths per 1,000 of Population. Male.	8 Total ratio of Deaths per 1,000 of Population. Female.	8 Total ratio of Deaths per 1,000 of Population. Total.	9 Mean ratio per 1,000 for previous five years.	10 No.
21	8	3	1	3	1	2,819	2,809	5,628	1,939	3,303	5·17	5·30	5·23	·66	1
38	34	11	3	5	1	1,214	1,285	2,499	795	1,514	3·92	4·24	4·08	·56	2
33	19	8	4	4	...	352	398	750	306	345	·84	·93	·91	·54	3
26	17	17	7	10	11	272	307	579	149	315	·70	·83	·77	·26	4
...	...	1	...	...	...	20	15	35	15	14	·23	·23	·23	·24	5
19	15	8	3	2	1	226	226	452	130	257	·81	·80	·80	·31	6
36	11	1	...	...	1	864	807	1,671	448	700	1·15	2·03	1·45	·63	7
11	17	6	9	9	14	192	177	369	114	191	·53	·49	·51	·30	8
16	3	...	3	...	1	694	689	1,383	434	487	1·39	1·41	1·40	·30	9
22	7	2	9	5	12	135	159	294	80	117	·85	·44	·40	·31	10
19	15	11	8	1	6	239	252	491	116	245	·47	·49	·48	·17	11
37	13	11	7	6	11	166	205	371	50	117	·32	·32	·32	·31	12
48	24	5	2	8	10	183	196	379	92	159	·38	·42	·40	·26	13
16	7	9	8	6	14	141	165	306	91	125	·27	·32	·30	1·81	14
24	15	6	4	8	16	186	205	391	115	176	·46	·52	·49	·12	15
14	4	7	6	...	4	72	68	140	33	42	·35	·34	·35	·33	16
5	...	...	...	...	2	651	664	1,315	428	689	1·93	1·97	1·95	·62	17
9	...	...	...	...	...	456	468	924	284	498	2·88	3·13	3·00	·25	18
...	...	...	...	...	...	435	421	856	279	472	1·15	1·27	1·20	·07	19
...	1	...	...	...	...	216	186	402	136	209	1·12	1·02	1·07	·10	20
4	5	...	1	...	...	772	825	1,597	643	759	1·68	1·99	1·80	·24	21
2	1	2	...	1	...	68	51	119	11	21	·32	·22	·22	·37	22
12	7	9	2	11	31	96	114	210	22	28	·30	·45	·37	·08	23
...	2	...	...	6	1	38	32	70	11	32	·17	·18	·11	·22	24
3	1	...	1	...	...	40	21	61	6	13	·17	·11	·15	·24	25
3	6	...	...	...	...	23	15	38	6	18	·06	·06	·07	·26	26
...	...	...	...	...	...	2	8	10	...	3	·01	·03	·02	·02	27
...	...	...	...	...	...	1	...	1	...	..	·00	...	·00	·06	28
418	332	117	79	85	137	10,573	10,768	21,341	6,733	10,849	1·04	1·18	1·11	·32	

N.B.—Small-pox should not include Measles, Chicken-pox, etc.

ANNUAL FORM No. IX.—DEATHS *registered from* *during each month*

1	2	3		4								5
		Circles of Registration.		Villages.								
No	District.	Number in each District.	Number from which deaths from fevers were reported.	Number in each District.	Number from which deaths from fevers were reported.	January.	February.	March.	April.	May.	June	
	Western Registration District.											
1	East Khandesh ...	23	23	1,478	1,406	1,586	2,352	2,742	2,011	1,636	888	
2	West Khandesh ...	10	10	1,242	1,182	733	969	1,642	1,067	675	443	
3	Nasik	19	19	1,667	1,510	949	983	1,293	1,241	827	701	
4	Thana	19	19	1,546	1,300	731	659	909	847	514	403	
5	Bombay Suburban ...	5	4	86	49	39	54	40	48	32	38	
6	Kolaba	13	13	1,482	1,252	561	563	832	804	485	338	
7	City of Bombay ...	1	1	1	1	202	205	232	181	194	209	
	Central Registration District.											
8	Ahmednagar ...	15	15	1,346	1,046	356	367	577	668	597	397	
9	Poona	20	20	1,157	957	860	824	1,162	1,304	1,165	905	
10	Sholapur	10	10	719	681	835	737	909	1,159	1,161	709	
11	Satara	18	18	1,341	1,228	921	786	1,161	1,654	1,268	905	
12	Ratnagiri	15	15	1,305	1,191	778	762	1,145	1,695	796	612	
	Southern Registration District.											
13	Belgaum ...	15	15	1,069	941	532	475	677	973	642	591	
14	Dharwar ...	18	18	1,277	1,121	920	816	1,040	1,021	692	569	
15	Bijapur ...	13	13	1,128	1,038	985	904	851	946	905	705	
16	Kanara ...	16	16	1,264	841	435	373	342	354	305	250	
	Gujarat Registration District.											
17	Surat	12	12	782	636	627	778	1,005	852	583	360	
18	Broach	9	9	404	358	449	528	839	997	636	392	
19	Kaira	15	15	579	566	590	701	1,494	1,317	762	472	
20	Panch Mahals ...	7	7	668	613	598	675	874	868	578	401	
21	Ahmedabad ...	13	13	871	814	1,505	1,580	1,671	1,392	970	726	
	Sind Registration District.											
22	Karachi	16	16	793	793	583	416	341	300	276	221	
23	Hyderabad ...	11	11	862	862	755	537	565	411	335	253	
24	Thar and Parkar ...	13	13	904	904	682	424	436	341	355	261	
25	Nawabshah ...	9	9	731	731	1,225	760	610	425	341	254	
26	Larkana	15	15	763	763	1,961	1,232	1,155	879	680	487	
27	Sukkur	12	12	671	671	2,035	1,225	959	666	646	563	
28	Upper Sind Frontier.	6	6	410	410	1,426	648	369	247	235	185	
	Total for the Presidency ...	368	367	26,546	23,860	23,854	21,328	25,872	24,638	18,291	13,372	

FEVERS *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *of the year 1930.*

July.	August.	September.	October.	November.	December.	6 Total. Male.	Female.	Total.	7 Ratio of Deaths per 1,000 of population. Male.	Female.	Total.	8 Mean ratio per 1,000 of previous five years.	9 No.
956	1,667	1,809	1,614	1,481	1,202	9,795	10,179	19,974	17·96	19·21	18·58	14·86	1
561	855	934	866	1,065	891	5,152	5,569	10,721	16·64	18·37	17·50	13·12	2
702	805	875	929	1,284	1,103	5,912	5,780	11,692	14·12	14·21	14·16	12·94	3
370	466	400	538	705	681	3,561	3,663	7,224	9·17	9·94	9·54	10·07	4
41	53	53	46	38	43	278	247	525	3·17	3·87	3·45	4·89	5
350	333	470	417	433	554	2,891	3,249	6,140	10·35	11·48	10·92	10·09	6
191	210	193	205	154	152	1,208	1,120	3,328	1·61	2·81	2·03	2·37	7
490	536	483	424	435	367	2,987	2,709	5,696	8·22	7·52	7·87	6·99	8
967	1,080	910	958	951	838	6,267	5,657	11,924	12·52	11·62	12·07	10·24	9
860	1,114	1,020	874	854	712	5,539	5,405	10,944	14·46	15·01	14·73	12·88	10
1,084	1,063	1,108	1,022	1,001	854	6,695	6,222	12,917	13·12	12·11	12·61	10·96	11
648	680	628	622	676	654	4,557	5,079	9,636	8·68	8·07	8·35	7·40	12
499	463	424	497	557	471	3,434	3,787	6,821	7·09	8·14	7·18	7·53	13
572	512	622	619	710	660	4,266	4,481	8,747	8·07	8·82	8·44	9·97	14
777	731	752	834	825	625	4,914	4,526	9,840	12·13	11·57	12·36	11·13	15
264	251	239	300	302	355	1,839	1,931	3,770	9·02	9·78	9·39	11·14	16
355	412	418	441	498	533	3,394	3,464	6,858	10·06	10·28	10·17	8·57	17
342	489	397	386	406	356	3,036	3,141	6,177	19·15	21·06	20·07	14·43	18
447	534	613	666	510	480	4,498	4,038	8,536	11·85	12·19	12·01	9·69	19
405	546	578	555	497	454	3,508	3,511	7,019	18·14	19·35	18·72	13·50	20
750	999	1,008	938	944	876	6,765	6,573	13,359	14·33	15·87	15·04	14·95	21
190	195	208	277	276	250	1,963	1,570	3,533	6·48	6·88	6·66	8·79	22
302	227	242	368	439	412	2,730	2,116	4,846	8·61	8·45	8·54	10·65	23
281	175	234	274	316	260	2,272	1 767	4,039	10·28	10·08	10·19	14·50	24
233	274	260	360	356	367	3,093	2,372	5,465	13·22	12·83	13·06	14·97	25
316	523	512	722	958	767	5,763	4,379	10 142	17·40	16·45	16·97	17·15	26
382	454	511	793	839	777	6,508	3,342	9,850	23·12	14·66	19·33	17·51	27
183	163	175	296	333	291	2,409	2,052	4,551	18·60	19·30	18·91	15·06	28
13,519	15,780	16,070	16,841	17,864	15,945	1,15,345	1,07,929	2,23,274	11·47	11·84	11·65	10·91	

ANNUAL FORM No. X.—DEATHS *registered from* DYSENTERY *during each month*

1	2	3		4		5					
		Circles of Registration.		Villages.							
No.	Districts.	Number in each District.	Number from which deaths from Dysentery and Diarrhœa were reported.	Number in each District.	Number from which deaths from Dysentery and Diarrhœa were reported.	January.	February.	March.	April.	May.	June.
	Western Registration District.										
1	East Khandesh ...	23	23	1,478	403	80	98	90	80	95	87
2	West Khandesh ...	10	10	1,242	258	36	22	46	48	37	31
3	Nasik	19	18	1,667	410	57	56	91	69	95	96
4	Thana	19	18	1,546	371	69	60	61	35	39	54
5	Bombay Suburban	5	3	86	69	28	27	24	27	20	16
6	Kolaba	13	13	1,482	1,017	96	79	66	70	86	72
7	City of Bombay ...	1	1	1	1	85	87	69	98	92	110
	Central Registration District.										
8	Ahmednagar ...	15	15	1,346	496	58	62	59	80	98	89
9	Poona	20	20	1,157	475	89	83	92	120	128	155
10	Sholapur	10	10	719	395	74	61	65	69	95	75
11	Satara	18	18	1,341	625	110	77	72	102	130	197
12	Ratnagiri	15	15	1 305	340	98	86	47	49	62	42
	Southern Registration District.										
13	Belgaum	15	14	1,069	522	167	149	137	178	263	386
14	Dharwar	18	18	1,277	296	81	64	72	83	89	111
15	Bijapur	13	13	1,128	476	116	68	98	78	74	118
16	Kanara	16	16	1,264	247	52	55	43	45	56	43
	Gujarat Registration District.										
17	Surat	12	12	782	100	28	40	36	49	58	39
18	Broach	9	9	401	94	8	13	11	27	34	36
19	Kaira	15	15	579	199	29	23	69	77	74	52
20	Panch Mahals ...	7	7	668	82	6	5	9	17	13	19
21	Ahmedabad ...	13	13	871	143	59	39	41	38	31	26
	Sind Registration District.										
22	Karachi	16	10	793	11	49	33	25	32	20	38
23	Hyderabad ...	11	7	862	12	15	11	10	8	...	1
24	Thar and Parkar ...	13	13	934	15	7	3	2	2	...	1
25	Nawabshah ...	9	5	731	15	5	4	1	2	1	1
26	Larkana	15	11	763	23	15	6	8	2	4	1
27	Sukkur	12	11	671	16	48	10	15	2	9	1
28	Upper Sind Frontier.	6	3	410	10	10	1	...	1	1	...
	Total for the Presidency ...	368	341	26,546	7,121	1,575	1,322	1,368	1,495	1,705	1,852

and DIARRHŒA *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *of the year 1930.*

July.	August.	September.	October.	November.	December.	6 Total. Male.	6 Total. Female.	6 Total. Total.	7 Ratio of Deaths per 1,000 of Population. Male.	7 Ratio of Deaths per 1,000 of Population. Female.	7 Ratio of Deaths per 1,000 of Population. Total.	8 Mean ratio per 1,000 of previous five years.	9 No.
158	345	323	125	94	92	812	855	1,667	1·48	1·61	1·55	1·85	1
74	178	120	65	39	29	362	362	724	1·17	1·19	1·18	1·01	2
143	185	167	116	71	68	640	576	1,216	1·53	1·42	1·47	1·61	3
89	165	134	69	82	69	485	441	926	1·25	1·20	1·22	·76	4
52	85	48	32	27	27	223	190	413	2·55	2·97	2·74	1·85	5
196	314	213	116	86	104	794	704	1,498	2·84	2·48	2·66	1·51	6
188	274	173	108	73	95	819	633	1,452	1·09	1·59	1·26	1·49	7
184	266	220	120	85	77	756	642	1,398	2·08	1·78	1·93	2·51	8
216	318	282	207	156	107	1,033	915	1,948	2·06	1·88	1·97	1·82	9
234	454	412	260	179	85	1,109	963	2,072	2·89	2·67	2·78	2·19	10
288	439	399	282	208	144	1,240	1,208	2,448	2·43	2·35	2·39	2·17	11
64	158	108	86	109	132	523	518	1,041	·99	·82	·84	0·98	12
337	340	313	297	291	179	1,456	1,531	2,987	3·00	3·29	3·15	2·95	13
103	109	97	88	97	70	542	522	1,064	1·03	1·03	1·03	9·11	14
157	184	177	208	180	90	765	783	1,548	1·89	2·00	1·94	1·64	15
87	111	83	71	44	50	384	356	740	1·88	1·80	1·84	2·59	16
64	91	53	39	23	39	269	290	559	·79	·86	·83	1·17	17
51	42	43	19	6	8	166	132	298	1·05	·88	·97	·77	18
86	116	89	42	39	25	408	313	721	1·07	·95	1·01	1·21	19
31	66	42	15	5	10	116	122	238	·59	·67	·64	·57	20
58	144	86	74	66	70	410	322	732	·87	·78	·82	·71	21
28	82	81	51	38	18	278	222	500	·91	·97	·94	·76	22
8	7	4	12	7	4	47	40	87	·14	·16	·15	·22	23
1	...	1	2	...	...	15	5	20	·08	·02	·05	1·21	24
3	1	...	1	1	2	13	12	25	·06	·06	·06	·04	25
...	4	4	3	1	3	36	20	56	·11	·07	·09	·24	26
3	10	6	2	16	10	77	60	137	·27	·27	·27	·27	27
...	...	...	3	3	2	14	7	21	·10	·07	·09	·11	28
2,903	4,488	3,678	2,522	2,029	1,609	13,792	12,744	26,536	1·37	1·40	1·39	1·34	

ANNUAL FORM NO. XI.—DEATHS *registered from* RESPIRATORY *each month of*

1	2	3		4		5					
No.	Districts.	Circles of Registration.		Villages.							
		Number in each District.	Number from which deaths from Respiratory Diseases were reported.	Number in each District.	Number from which deaths from Respiratory Diseases were reported.	January.	February.	March.	April.	May.	June.
	Western Registration District.										
1	East Khandesh ...	23	23	1,478	991	568	699	672	401	331	212
2	West Khandesh ...	10	10	1,242	775	335	454	588	298	180	194
3	Nasik	19	19	1,667	1,131	544	585	664	544	388	328
4	Thana	19	19	1,546	1,062	468	544	646	533	360	266
5	Bombay Suburban ...	5	4	86	49	64	86	88	73	60	57
6	Kolaba	13	13	1,482	542	389	367	440	382	280	225
7	City of Bombay ...	1	1	1	1	1,008	1,058	1,180	1,061	1,002	956
	Central Registration District.										
8	Ahmednagar ...	15	15	1,346	1,023	418	389	463	475	331	305
9	Poona	20	20	1,157	777	520	463	566	490	439	401
10	Sholapur	10	10	719	498	352	263	251	288	206	173
11	Satara	18	18	1,341	741	263	209	345	325	269	241
12	Ratnagiri	15	15	1,305	959	392	376	413	427	323	290
	Southern Registration District.										
13	Belgaum	15	15	1,069	734	362	271	475	404	297	258
14	Dharwar	18	18	1,277	737	363	392	468	392	300	227
15	Bijapur	13	13	1,128	684	343	283	310	251	196	160
16	Kanara	16	16	1,254	334	77	88	99	94	57	57
	Gujarat Registration District.										
17	Surat	12	12	782	658	758	912	1,165	873	570	433
18	Broach	9	9	404	308	242	265	271	364	198	119
19	Kaira	15	15	579	539	663	688	1,006	848	450	346
20	Panch Mahals ...	7	7	668	356	143	154	157	148	93	66
21	Ahmedabad ...	13	13	871	577	749	745	867	661	524	355
	Sind Registration District.										
22	Karachi	16	16	793	224	516	507	326	202	158	134
23	Hyderabad ...	11	11	862	179	207	327	243	110	77	45
24	Thar and Parkar ...	13	13	904	366	228	186	157	105	93	41
25	Nawabshah ...	9	9	731	210	107	108	91	78	19	26
26	Larkana	15	15	763	112	87	96	39	32	12	9
27	Sukkur	12	12	671	38	155	149	102	54	27	54
28	Upper Sind Frontier.	6	6	410	40	56	25	8	9	...	1
	Total for the Presidency ...	368	368	26,546	14,645	10,367	10,689	12,100	9,923	7,230	5,894

DISEASES *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1930.*

July.	August.	September.	October.	November.	December.	6 Total. Male.	6 Total. Female.	6 Total. Total.	7 Ratio of Deaths per 1,000 of Population. Male.	7 Ratio of Deaths per 1,000 of Population. Female.	7 Ratio of Deaths per 1,000 of Population. Total.	8 Mean ratio per 1,000 of previous five years.	9 No.
390	340	387	383	447	408	2,827	2,301	5,128	5·18	4·34	4·77	4·15	1
172	229	190	229	251	257	1,693	1,614	3,307	5·47	5·32	5·40	3·36	2
376	486	525	484	486	490	3 065	2,835	5,900	7·32	6·97	7·16	5·32	3
298	357	305	303	368	397	2,587	2,158	4,845	6·92	5·85	6·41	4·13	4
52	62	51	62	60	66	431	350	781	4·92	5·48	5·16	3·96	5
275	311	353	292	310	312	2,108	1,828	3,936	7·54	6·46	7·00	5·02	6
956	919	774	790	675	732	6,255	4,856	11,111	8·32	12·24	9·67	10·64	7
401	433	447	369	430	417	2,440	2,438	4,878	6·72	6·76	6·74	6·01	8
471	511	511	480	494	491	2,936	2,904	5,840	5·86	5·96	5·90	6·09	9
204	242	238	267	314	249	1,555	1,552	3,107	4·06	4·31	4·18	3·69	10
276	276	359	367	311	289	1,766	1,764	3,530	3·46	3·43	3·45	2·58	11
330	331	338	323	313	322	2,328	1,840	4,168	4·43	2·93	3·61	4·33	12
249	284	266	246	336	288	2,004	1,717	3,721	4·14	3·69	3·92	3·85	13
250	264	278	273	290	301	1,879	1,919	3,798	3·56	3·78	3·67	3·37	14
201	221	220	262	279	257	1,605	1,378	2,983	3·96	3·52	3·75	3·31	15
56	65	56	53	61	77	507	333	840	2·49	1·69	2·09	2·64	16
419	384	372	370	392	513	3,861	3,290	7,151	11·45	9·77	10·61	10·66	17
148	151	131	142	147	147	1,316	1,009	2,325	8·29	6·76	7·56	9·23	18
445	510	477	462	441	423	3,819	2,940	6,759	10·06	8·88	9·51	10·16	19
79	109	96	98	78	93	780	534	1,314	4·03	2·94	3·51	3·28	20
377	545	530	529	516	609	3,951	3,056	7,007	8·34	7·38	7·89	8·17	21
154	156	176	167	195	260	1,686	1,265	2,951	5·57	5·54	5·56	5·16	22
61	61	78	83	111	117	874	646	1,520	2·75	2·58	2·68	2·81	23
33	13	25	16	23	46	599	367	966	2·71	2·09	2·44	2·75	24
15	8	5	16	18	47	344	194	538	1·47	1·05	1·29	·96	25
12	16	7	7	13	29	236	123	359	·71	·46	·60	·80	26
31	25	26	35	55	82	540	255	795	·91	1·12	1·56	·58	27
...	...	3	3	8	7	77	43	120	·58	·40	·49	·14	28
6,621	7,309	7,284	7,111	7,422	7,729	54,169	45,509	99,678	5·39	4·99	5·20	4·92	

ANNUAL FORM NO. XII.—DEATHS *registered from during each month*

1	2	3		4		5					
		Circles of Registration.		Villages.							
No.	Districts.	Number in each District.	Number from which deaths from Plague were reported.	Number in each District.	Number from which deaths from Plague were reported.	January.	February.	March.	April.	May.	June.
	Western Registration District.										
1	East Khandesh ...	23	...	1,478	...	...	...	...	...	...	...
2	West Khandesh ...	10	...	1,242	...	...	...	...	...	...	...
3	Nasik	19	2	1,667	4	11	18	2	...	...	...
4	Thana	19	9	1,546	25	18	21	23	21	15	...
5	Bombay Suburban ...	5	3	86	3	...	...	...	2	...	...
6	Kolaba	13	...	1,482	...	...	...	...	...	...	...
7	City of Bombay ...	1	1	1	1	...	2	4	...	7	2
	Central Registration District.										
8	Ahmednagar ...	15	1	1,346	1	2	5	5	...	...	...
9	Poona	20	5	1,157	10	48	49	17	...	...	...
10	Sholapur	10	7	719	23	98	55	35	2	...	...
11	Satara	18	14	1,341	65	124	118	85	38	10	5
12	Ratnagiri	15	7	1,305	15	98	66	22	5	1	...
	Southern Registration District.										
13	Belgaum ...	15	14	1,069	136	320	202	104	47	15	25
14	Dharwar	18	17	1,277	176	496	269	105	28	9	4
15	Bijapur	13	7	1,128	38	108	53	17	1	...	...
16	Kanara	16	7	1,264	12	13	6	6	11	6	7
	Gujarat Registration District.										
17	Surat	12	2	782	2	...	...	...	2	...	3
18	Broach	9	...	404	...	...	...	...	...	...	...
19	Kaira	15	...	579	...	...	...	...	...	...	...
20	Panch Mahals ...	7	...	668	...	...	...	...	...	...	...
21	Ahmedabad ...	13	...	871	...	...	...	...	...	...	...
	Sind Registration District.										
22	Karachi	16	...	793	...	...	...	...	...	...	...
23	Hyderabad ...	11	...	862	...	...	...	...	...	...	...
24	Thar and Parkar ...	13	...	904	...	...	...	...	...	...	...
25	Nawabshah ...	9	...	731	...	...	...	...	...	...	...
26	Larkana	15	...	763	...	...	...	...	...	...	...
27	Sukkur	12	...	671	...	...	...	...	...	...	...
28	Upper Sind Frontier.	6	...	410	...	...	...	...	...	...	...
	Total for the Presidency ...	368	96	26,546	506	1,336	864	425	157	63	46

PLAGUE *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *of the year 1930.*

July.	August.	September.	October.	November.	December.	6 Total. Male.	Female.	Total.	7 Ratio of Deaths per 1,000 of Population. Male.	Female.	Total.	8 Mean ratio per 1,000 of previous five years.	9 No.
...	...	...	...	...	...	...	...	...	...	...	...	·66	1
...	...	...	...	...	...	...	...	...	...	...	...	·01	2
...	...	1	...	...	...	21	11	32	·05	·03	·04	·53	3
21	31	8	2	...	5	90	75	165	·23	·23	·22	·13	4
3	...	3	1	...	1	6	4	10	·07	·06	·07	·12	5
...	...	...	...	...	...	...	...	...	...	...	...	·14	6
1	...	2	2	...	...	16	4	20	·02	·01	·02	·12	7
...	...	...	...	...	...	6	6	12	·02	·02	·02	·07	8
...	...	...	...	...	...	62	52	114	·12	·11	·12	·04	9
...	...	...	...	...	...	84	106	190	·22	·29	·26	·65	10
...	2	1	37	12	35	188	279	467	·37	·54	·46	3·61	11
5	6	3	3	...	...	74	135	209	·14	·21	·18	·10	12
45	67	99	135	63	98	527	693	1,220	1·09	1·49	1·28	1·28	13
47	212	211	189	263	201	834	1,200	2,034	1·58	2·36	1·96	3·34	14
...	6	13	11	69	90	160	208	368	·39	·53	·46	·56	15
11	2	4	12	26	37	60	81	141	·29	·42	·35	·41	16
3	18	1	4	6	7	19	25	44	·06	·07	·07	·22	17
...	...	...	...	...	...	...	...	...	...	...	...	...	18
...	...	...	...	...	...	...	...	...	...	...	...	...	19
...	...	...	...	...	...	...	...	...	...	...	...	...	20
...	...	...	...	...	...	...	...	...	...	...	...	...	21
...	...	...	...	...	...	...	...	...	...	...	...	·03	22
...	...	...	...	...	...	...	...	...	...	...	...	...	23
...	...	...	...	...	...	...	...	...	...	...	...	...	24
...	...	...	...	...	...	...	...	...	...	...	...	...	25
...	...	...	...	...	...	...	...	...	...	...	...	...	26
...	...	...	...	...	...	...	...	...	...	...	...	...	27
...	...	...	...	...	...	...	...	...	...	...	...	...	28
136	344	346	396	439	474	2,147	2,879	5,026	·21	·32	·26	·61	

APPENDIX

STATEMENT

Showing the Particulars of Vaccination in the

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
	WESTERN REGISTRATION DISTRICT.			
	EAST KHANDESH COLLECTORATE—			
1	**Chopda Town (Municipal)**	16,980	.....	1
2	**Nasirabad do. (Local Fund)**... ...	12,188	.....	.....
3	**Jalgaon do. (Municipal)**	23,710	.....	1
4	**In the 13 Rural circles.** { Local Fund ... / Municipal ... }	1,023,009	224	18
	Total ...	1,075,887	236	20
	WEST KHANDESH COLLECTORATE—			
5	**Dhulia Town (Municipal)**	30,605	.....	1
6	**Nandurbar do. (do.)**	13,842	.....	1
7	**In the 8 Rural circles.** { Local Fund ... / Municipal ... }	597,400	109	13
8	**Dhulia Jail**	.....	.....	S. M. S. 1
	Total ...	641,847	118	15 / S. M. S. 1
	NASIK COLLECTORATE—			
9	**Nasik Town (Municipal)**	42,756	.....	1
10	**Yeola do. (do.)**	13,911	.....	1
11	**Malegaon do. (do.)**	23,711	.....	1
12	**Deolali Cantonment**	18,789	.....	.....
13	**In the 12 Rural circles, Local Fund** ...	733,409	124	17
	Total ...	832,576	142	20
	THANA COLLECTORATE—			
14	**Thana Town (Municipal)**	22,639	.....	1
15	**Kalyan do. (do.)**	17,829	.....	1
16	**In the 9 Rural circles, Local Fund** ...	719,448	205	17
	Total ...	759,916	221	19

IV.

No. I.

Bombay Presidency during the year 1930-31.

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
6			7	8	9	10	11	12
Male.	Female.	Total.						
P. 186	203	389	692	389	270	61	332	53
R. 301	2	303						
P. 166	150	316	466	316	207	32	240	76
R. 148	2	150						
P. 214	207	421	434	421	294	25	319	100
R. 11	2	13						
P. 14,521	13,508	28,029	2,840	28,029	19,269	3,415	22,796	5,112
R. 17,705	1,385	19,090						
P. 1,222	1,053	2,275		2,275	1,656	253	1,829	437
R. 1,575	159	1,734						
P. 16,309	15,121	31,430	2,636	31,430	21,696	3,786	25,516	5,778
R. 19,740	1,550	21,290						
P. 561	582	1,143	1,551	1,143	845	91	941	202
R. 226	182	408						
P. 345	369	714	869	714	506	153	663	46
R 119	36	155						
P. 10,475	10,434	20,909	2,144	20,909	14,163	1,979	16,313	4,678
R. 5,031	629	5,660						
P. 523	504	1,027		1,027	674	170	955	69
R. 240	36	276						
P. ...	2	2	1,139	2	2	...	2	...
R. 1,122	15	1,137						
P. 11,904	11,891	23,795	2,093	23,795	16,190	2,393	18,874	4,895
R. 6,758	898	7,636						
P. 511	522	1,033	1,331	1,033	757	155	916	115
R. 242	56	298						
P. 225	233	458	469	458	308	86	395	61
R. 10	1	11						
P. 401	352	753	754	753	631	57	691	62
R. 1	.....	1						
P. 49	32	81	98	81	68	13	81	...
R. 8	9	17						
P. 13,758	13,631	27,389	1,874	27,389	18,546	4,383	23,043	4,333
R. 3,840	638	4,478						
P. 14,944	14,770	29,714	1,721	29,714	20,310	4,694	25,126	4,571
R. 4,101	704	4,805						
P. 278	277	555	1,618	555	478	54	533	19
R. 912	151	1,063						
P. 313	300	613	671	613	327	208	545	62
R 36	22	58						
P. 10,748	10,482	21,230	1,397	21,230	14,050	5,274	19,481	1,735
R. 1,783	731	2,514						
P. 11,339	11,059	22,398	1,370	22,398	14,855	5,536	20,559	1,816
R. 2,731	904	3,635						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of Successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	WESTERN REGISTRATION DISTRICT.					
	EAST KHANDESH COLLECTORATE—					
1	Chopda Town (Municipal)	303	21	193	98·80	19·09
2	Nasirabad do. (Local Fund)	150	28	72	100·00	35·89
3	Jalgaon do. (Municipal)	13	...	11	99·37	...
4	In the 13 Rural circles. Local Fund ...	19,019	3,742	6,790	99·48	30·42
	In the 13 Rural circles. Municipal ...	1,734	504	520	99·51	41·51
	Total ...	21,290	4,295	7,586	99·47	31·34
	WEST KHANDESH COLLECTORATE—					
5	Dhulia Town (Municipal)	408	146	111	100·00	49·16
6	Nandurbar do. (do.)	135	70	42	99·25	61·94
7	In the 8 Rural circles. Local Fund ...	5,660	1,458	2,037	99·88	40·24
	In the 8 Rural circles. Municipal ...	276	86	105	99·68	50,29
8	Dhulia Jail	1,137	1,137	...	100·00	100·00
	Total ...	7,636	2,897	2,295	99·49	54·24
	NASIK COLLECTORATE—					
9	Nasik Town (Municipal)	298	100	73	99·78	44·44
10	Yeola do. (do.)	11	3	1	99·49	30·00
11	Malegaon do. (do.)	1	...	1	100·00	...
12	Deolali Cantonment	17	4	3	100·00	28·57
13	In the 12 Rural circles, Local Fund ...	4,478	1,289	1,473	95·61	42·89
	Total ...	4,805	1,396	1,551	99·43	42·90
	THANA COLLECTORATE—					
14	Thana Town (Municipal)	1,063	318	356	99·44	44·98
15	Kalyan do. (do.)	58	29	25	98·91	87·88
16	In the 9 Rural circles, Local Fund ...	2,514	927	758	99·92	52·78
	Total ...	3,635	1,274	1,139	99·89	24·52

No. 1--*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
20·85	13·62	63·67	531	31·36	18	1·06
21·99	24·05	48·00	.....	.....	1	·82
13·45	23·75	84·61	506	21·34	.....	.....
25·94	18·24	35·57	27,272	26·66	154	1·50
2·28	19·21	29·98				
27·71	18·38	35·63	30,980	28·79	172	·16
35·51	17·67	27·21	1,403	45·84	16	·52
52·95	6·44	27·09	507	36·63	6	·43
29·75	21·89	35·99	15,954	26·71	612	1·22
1·77	6·72	38·05				
.....	.....	.....	.....	.....	.....	.....
33·92	20·57	30·05	19,286	30·05	634	·99
23·78	11·13	24·50	1,740	40·73	40	·93
28·61	12·21	9·09	540	38·82	9	·65
29·14	8·23	100·00	576	24·29	110	4·64
4·52	100·00	17·65	190	10·11	.....	.....
33·17	15·82	32·89	21,796	29·72	363	·49
31·85	15·38	32·28	24,842	29·84	522	·63
37·59	3·42	33·49	956	42·23	10	·44
32·19	10·11	43·11	370	20·75	8	·45
28·36	8·17	30·15	20,018	27·82	212	·29
28·73	8·11	31·33	21,344	28·09	230	·30

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
	WESTERN REGISTRATION DISTRICT —*contd.*			
	BOMBAY SUBURBAN DISTRICT—			
17	Bandra Town (Municipal)	29,271	...	1
18	Kurla do. (do.)	26,059	...	1
19	Santa Cruz Cantonment	6,953	...	1
20	In the 2 Rural circles, Local Fund ...	1,943	...	2
	Total ...	154,226	...	4
	KOLABA COLLECTORATE—			
21	Panwel Town (Local Fund)	8,625	...	...
22	Alibag do. (do.)	5,274	...	...
23	Mahad do. (do.)	7,192	...	...
24	In the 8 Rural circles, Local Fund ...	541,851	249	14
	Total ...	562,942	252	14
	TOTAL BY ESTABLISHMENT IN WESTERN REGISTRATION DISTRICT.			
	Local Fund	3,728,151	172	70
	Municipal	273,451	...	13
	Cantonment	25,742	...	...
	Dispensary	...	...	...
	Total ...	4,027,464	182	92 S.M.S. 1

No. I—*contd.*

Total number of persons vaccinated.				Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
					Total.	Successful.			Unknown.
						Under one year.	One and under six years.	Total of all ages.	
	Male.	Female.	Total.						
6				7	8	9	10	11	12
P.	347	316	663	779	663	475	133	617	45
R.	70	46	116						
P.	407	478	885	919	885	517	112	643	242
R.	25	9	34						
P.	.....	.....	...	...	...	...	...	...	...
R.	.....	.....	...						
P.	1,537	1,341	2,878	2,138	2,878	1,895	532	2,543	331
R.	822	577	1,399						
P.	2,291	2,135	4,426	1,494	4,426	2,887	777	3,803	618
R.	917	692	1,549						
P.	70	55	125	129	125	83	15	103	22
R.	3	1	4						
P.	59	57	116	167	116	18	30	99	17
R.	31	20	51						
P.	69	65	134	158	134	89	33	124	10
R.	17	7	24						
P.	9,466	9,065	18,531	1,706	18,531	12,616	4,684	17,431	1,095
R.	4,502	841	5,543						
P.	9,664	9,242	18,906	1,738	18,906	12,855	4,762	17,757	1,142
R.	4,553	869	5,422						
P.	60,869	58,788	119,657	2,005	119,657	80,986	20,377	1,02,173	17,307
R.	33,882	4,831	38,713						
P.	5,533	5,396	10,929	1,185	10,929	7,737	1,558	9,379	1,513
R.	3,768	702	4,470						
P.	49	32	81	98	81	68	13	81	...
R.	8	9	17						
P.	.....	2	2	1,139	2	2	...	2	...
R.	1,122	15	1,137						
P.	66,451	64,218	130,669	1,882	130,669	88,793	21,948	111,635	18,820
R.	38,780	5,557	44,337						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	WESTERN REGISTRATION DISTRICT —*contd.*					
	BOMBAY SUBURBAN DISTRICT—					
17	Bandra Town (Municipal)	116	67	47	99·84	97·10
18	Kurla do. (do.)	34	5	24	100·00	50·00
19	Santa Cruz Cantonment	...	...	...	...	...
20	In the 2 Rural circles, Local Fund ...	1,399	569	573	99·85	68·88
	Total ...	1,549	641	644	99·92	70·83
	KOLABA COLLECTORATE—					
21	Panwel Town (Local Fund)	4	2	2	100·00	100·00
22	Alibag do. (do.)	51	18	27	100·00	75·00
23	Mahad do. (do.)	24	6	13	100·00	51·51
24	In the 8 Rural circles, Local Fund ...	5,343	2,417	1,439	94·22	61·53
	Total ...	5,422	2,443	1,481	99·96	61·99
	TOTAL BY ESTABLISHMENT IN WESTERN REGISTRATION DISTRICT.					
	Local Fund	36,713	10,456	13,184	99·82	40·95
	Municipal	4,470	1,349	1,509	99·61	45·29
	Cantonment	17	5	3	100·00	28·57
	Dispensary	1,137	1,137	...	100·00	100·00
	Total ...	44,337	12,946	14,696	99·81	43·68

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
23·36	6·78	40·52	.....	.....	6	·20
24·67	27·34	70·58	.....	.....	4	·15
.....	...	...	248	35·66	...	...
34·03	11·50	40·96	.....	.....	29	3·37
26·81	13·06	41·57	.....	.....	39	·25
12·17	17·60	50·00	138	16·00	4	·47
22·19	13·66	52·94	179	33·34	3	·57
18·07	7·46	54·16	111	15·43	12	1·67
36·63	59·90	41·79	15,166	27·99	179	·33
35·88	6·04	27·31	15,594	27·70	198	·35
30·21	14·47	36·06	1,05,654	28·34	1,568	·42
39·20	13·84	33·76	13,588	49·69	228	·83
4·52	100·00	17·65	190	10·11	...	...
.....	.....	...	...	.....	...	...
30·93	14·40	33·15	117,655	29·21	1,796	·43

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
25	BOMBAY CITY	1,175,914	52,146	9
	CENTRAL REGISTRATION DISTRICT.			
	AHMEDNAGAR COLLECTORATE—			
26	Sangamner Town (Local Fund) ...	12,737	23,781	.....
27	Ahmednagar Town (Municipal) ...	34,358	11,292	1
28	Ahmednagar Cantonment	10,997	1,648	.....
29	In the 12 Rural Circles (Local Fund) ...	682,986	134	17
	Total ...	741,088	125	18
	POONA COLLECTORATE—			
30	Junnar Town (Local Fund) ...	7,381	.....	.....
31	Baramati do. (do.)	11,905	.....	.....
32	Khed do. (do.)	7,018	.....	.....
33	Lonavla do. (do.)	6,337	.....	.....
34	Poona City (Municipal)	138,227	23,451	2
35	Poona and Kirkee Cantonments ...	41,082	3,392	2
36	In the 11 Rural Circles { Local Fund ... / Municipal ... }	791,659	165	15
37	Yeravda Central Prison	.....	.....	Medical Officer. 1
	Total ...	.....	.....	19 Medical Officer. 1
	SHOLAPUR COLLECTORATE—			
38	Sholapur Town (Municipal) ...	119,347	12,269	2
39	Barsi do. (do.) ...	22,074	1,170	1
40	Pandharpur do. (do.) ...	25,210	47,583	1
41	In the 7 Rural Circles { Local Fund ... / Municipal ... }	575,606	146	11
	Total ...	742,237	163	15

No. I—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
6			7		9	10	11	12
Male.	Female.	Total.						
P. 8,832	9,111	17,943	3,992	17,943	12,863	3,727	16,662	1,196
R. 12,139	5,847	17,986						
P. 32	32	64	68	64	42	14	56	8
R. 4	.....	4						
P. 1,005	1,051	2,056	2,310	2,056	1,595	382	1,995	47
R. 220	32	252						
P. 100	62	162	296	162	130	19	149	...
R. 107	27	134						
P. 12,549	12,399	24,941	2,376	24,941	17,651	5,693	23,378	1,359
R. 13,452	1,993	15,445						
P. 13,679	13,544	27,223	2,392	27,223	19,418	6,106	25,778	1,414
R. 13,783	2,052	15,835						
P. 56	55	111	136	111	62	41	103	8
R. 20	5	25						
P. 150	147	297	441	297	208	70	280	16
R. 136	8	144						
P. 112	87	199	205	199	129	54	184	15
R. 5	1	6						
P. 66	64	130	135	130	78	41	122	8
R. 4	1	5						
P. 1,552	1,652	3,204	1,675	3,204	2,474	298	2,743	459
R. 97	49	146						
P. 410	461	871	776	871	781	55	836	35
R. 588	93	681						
P. 12,176	12,099	24,275	2,173	24,275	16,545	5,507	22,264	1,999
R. 6,611	1,422	8,033						
P. 100	117	217		217	167	22	191	26
R. 54	15	69						
P. 40	13	53	1,767	53	5	4	9	...
R. 1,590	124	1,714						
P. 14,662	14,695	29,357	2,010	29,357	20,449	6,092	26,732	2,566
R. 9,105	1,718	10,823						
P. 2,254	2,206	4,460	2,464	4,460	2,603	1,510	4,232	227
R. 388	81	469						
P. 570	447	1,017	1,061	1,017	461	417	924	92
R. 28	16	44						
P. 587	568	1,155	2,662	1,155	690	194	916	239
R. 1,172	335	1,507						
P. 9,176	8,972	18,151	2,308	18,151	11,867	4,649	16,801	1,345
R. 5,579	562	6,141						
P. 793	753	1,546		1,546	1,071	328	1,420	126
R. 295	59	354						
P. 13,383	12,946	26,329	2,323	26,329	16,692	7,078	24,293	2,029
R. 7,462	1,053	8,515						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
25	BOMBAY CITY	17,986	...	17,986	99·49	...
	CENTRAL REGISTRATION DISTRICT.					
	AHMEDNAGAR COLLECTORATE—					
26	Sangamner Town (Local Fund)	4	1	2	100·00	50·00
27	Ahmednagar Town (Municipal)	252	83	137	99·30	70·94
28	Ahmednagar Cantonment	134	21	10	91·98	16·94
29	In the 12 Rural Circles (Local Fund) ...	15,445	12,079	1,703	99·13	87·90
	Total ...	15,835	12,184	1,852	99·88	87·13
	POONA COLLECTORATE—					
30	Junnar Town (Local Fund)	25	2	...	100·00	8·00
31	Baramati do. (do.)	144	61	28	99·65	69·83
32	Khed do. (do.)	6	1	...	100·00	16·67
33	Lonavla do. (do.)	5	...	5	100·00	...
34	Poona City (Municipal)	146	18	125	99·99	85·71
35	Poona and Kirkee Cantonments ...	681	331	268	100·00	80·15
36	In the 11 Rural Circles { Local Fund ...	8,033	3,768	2,505	99·86	68·16
	{ Municipal ...	69	20	29	100·00	50·00
37	Yeravda Central Prison	1,711	46	...	16·98	2·68
	Total ...	10,823	42,47	2,960	99·82	54·01
	SHOLAPUR COLLECTORATE—					
38	Sholapur Town (Municipal)	469	262	163	99·98	85·62
39	Barsi do. (do.)	44	22	11	99·98	66·67
40	Pandharpur do. (do.)	1,507	1,296	200	100·00	99·16
41	In the 7 Rural Circles { Local Fund ...	6,141	4,378	949	99·97	84·23
	{ Municipal ...	354	240	73	100·00	85·41
	Total ...	8,515	6,193	1,396	99·97	86·99

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
14·17	6·66	100·00	19,534	16·61	1,011	·86
4·47	12·50	50·00	452	35·49	3	0·24
60·48	2·29	53·93	1,943	56·57	26	0·76
15·46	.....	7·46	260	23·64	.....	.....
51·91	5·45	11·02	22,074	32·32	219	0·32
51·22	5·19	11·70	24,729	33·37	248	0·33
14·23	7·22	.....	247	33·42	2	0·27
28·61	5·39	19·44	313	26·29	1	0·08
26·38	7·54	.....	191	27·24	2	0·29
19·25	6·15	100·00	182	28·72	1	0·16
20·72	14·33	85·62	4,955	37·19	346	2·60
28·44	4·02	39 35	1,651	40·24	2	0·05
33·15	8·23 11·96	31·18 42·03	22,243	28·10	173	0·22
.....	.....	.....	.....	.....	.....	.....
31·02	8·74	27·35	29,782	29·83	527	0·53
36·62	5·09	34·75	4,678	39·20	103	0·86
42·86	9·05	25·00	745	33·75	2	0·09
37·74	20·69	13·27	1,443	54·24	6	0·24
39·67	7·41 8·15	15·45 20·62	17,240	29·95	87	0·15
41·07	7·71	16·39	24,106	32·48	198	0·27

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
	CENTRAL REGISTRATION DISTRICT—*contd.*			
	SATARA COLLECTORATE—			
42	Satara Town (Municipal)	20,045	7,485	1
43	Wai do. (Local Fund)	10,221	4,266	.....
44	Karad do. (do.)	10,243	6,881	.....
35	Ashta do. (do.)	9,021	.....	.....
46	Islampur do. (do.)	7,916	.....	.....
47	In the 14 Rural Circles { Local Fund ... / Municipal ... }	967,974	213	19
	Total ...	1,025,410	209	20
	RATNAGIRI COLLECTORATE—			
48	Ratnagiri Town (Local Fund)	14,600	2,643	.....
49	Chiplun do. (do.)	11,005	.....	.....
50	Malwan do. (do.)	22,215	.....	.....
51	Vengurla do. (do.)	19,126	5,764	.....
52	In the 11 Rural Circles (Local Fund) ...	1,128,270	286	21
	Total ...	1,195,216	289	21
	TOTAL BY ESTABLISHMENT IN CENTRAL REGISTRATION DISTRICT.			
	Local Fund	4,201,029	185	83
	Municipal	449,467	7,979	8
	Cantonment	52,009	2,752	2
	Dispensaries (Yeravda and Railways) ...	.....	.....	M. O. 3
	Total ...	4,702,505	.....	93 M. O. 3

No. I—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
6			7	8	9	10	11	12
Male.		Female.	Total.					
P.	300	308	608	1,093	608	372	144	518	89
R.	1,321	64	385						
P.	177	141	318	992	318	211	84	304	14
R.	477	197	674						
P.	154	153	307	307	307	239	68	307	...
R.	....	.....	...						
P.	86	69	155	519	155	119	27	147	8
R.	318	46	364						
P.	175	129	304	692	304	237	41	297	7
R.	333	55	388						
P.	16,043	15,703	31,746	5,164	31,746	21,419	4,434	26,015	5,721
R.	50,025	13,352	66,377						
P.	70	81	151	...	151	92	41	153	18
R.	24	3	27						
P.	17,005	16,584	33,589	5,090	33,589	22,689	4,639	27,721	5,857
R.	51,498	16,717	68,215						
P.	210	184	394	867	394	219	166	390	4
R.	396	77	473						
P.	158	123	281	392	281	115	141	265	16
R.	74	37	111						
P.	97	88	185	242	185	133	39	180	5
R.	31	26	57						
P.	173	162	335	549	335	188	126	322	13
R.	129	85	214						
P.	17,817	16,697	34,514	2,509	34,514	22,480	9,150	32,750	1,754
R.	13,657	4,517	18,174						
P.	18,455	17,254	35,709	2,609	35,709	23,135	9,622	33,907	1,792
R.	14,287	4,742	19,029						
P.	69,403	67,304	136,707	3,052	136,707	91,942	30,145	124,365	12,300
R.	91,251	25,384	116,635						
P.	7,331	7,183	14,414	2,208	14,414	9,525	3,316	13,072	1,323
R.	2,599	654	3,253						
P.	510	523	1,033	924	1,033	911	74	985	35
R.	695	120	815						
P.	166	71	237	680	287	81	94	191	1
R.	1,650	155	1,805						
P.	77,310	75,081	152,391	2,864	152,391	102,459	33,629	138,613	13,659
R.	96,195	26,313	122,508						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	CENTRAL REGISTRATION DISTRICT—*contd.*					
	SATARA COLLECTORATE—					
42	Satara Town (Municipal)	385	25	299	99·81	29·09
43	Wai do. (Local Fund)	674	64	255	100·00	15·27
44	Karad do. (do.)	...	...	...	100·00	...
45	Ashta do. (do.)	364	...	364	100·00	...
46	Islampur do. (do.)	388	147	176	100·00	69·34
47	In the 14 Rural Circles { Local Fund ...	66,377	4,740	60,976	99·58	87·76
	{ Municipal ...	27	...	27	100·00	...
	Total ...	68,215	4,976	62,097	97·16	81·33
	RATNAGIRI COLLECTORATE—					
48	Ratnagiri Town (Local Fund)	473	273	91	100·00	71·47
49	Chiplun do. (do.)	111	96	10	100·00	95·05
50	Malwan do. (do.)	57	57	...	100·00	100·00
51	Vengurla do. (do.)	214	96	11	100·00	47·29
52	In the 11 Rural Circles (Local Fund)	18,174	11,718	2,913	99·97	76·78
	Total ...	19,029	12,250	3,025	99·97	56·54
	TOTAL BY ESTABLISHMENT IN CENTRAL REGISTRATION DISTRICT.					
	Local Fund	116,635	37,486	69,988	99·97	86·36
	Municipal	3,253	1,956	1,064	99·85	89·68
	Cantonment	815	352	278	98·70	65·55
	Dispensaries (Yeravda and Railways) ...	1,805	120	14	80·93	6·70
	Total ...	122,508	39,924	71,344	99·91	78·03

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
27·09	14·64	77·66	577	28·78	15	0·75
36·00	4·40	37·83	349	34·18	4	0·39
29·97	.....	.....	415	40·52	1	0·09
16·29	5·16	100·00	245	27·16	...	...
56·09	2·30	45·36	259	32·72	6	0·76
31·91	13·02	91·86	28,599	29·53	190	0·20
	11·92	100·00				
31·89	17·43	91·03	30,444	29·69	216	0·21
45·41	1·02	57·72	645	44·18	9	0·62
32·80	5·69	86·49	296	26·86	1	0·09
10·67	2·70	100·00	439	19·76	4	0·18
21·86	3·88	47·06	308	16·10	3	0·15
39·41	5·08	64·48	31,910	28·28	323	0·29
38·62	5·02	64·38	33,598	28·11	340	0·28
38·53	9·00	60·11	124,061	29·54	1,005	0·24
35·68	9·17	32·71	16,667	37·08	522	1·16
25·73	3·39	34·11	2,111	40·59	3	0·06
.....	0·42	0·78	.....	.....	.....	.....
37·96	8·97	58·24	142,859	30·38	1,530	0·33

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.	
1	2	3	4	5	
	SOUTHERN REGISTRATION DISTRICT.				
	BELGAUM COLLECTORATE—				
53	Gokak Town (Municipal)	9,989	18,184	.....	
54	Athani do. (do.)	13,538	15,052	... ..	
55	Belgaum do. (do.)	36,219	69,691		1
56	Do. Cantonment ...	6,889	3,369	S. A. S.	1
57	In the 8 Rural circles	883,101	190		17
58	Hindalgi Central Prison ..	.....	.....	M. O.	1
	Total ...	949,736	4,611		18
				S. A. S.	1
				M. O.	1
	DHARWAR COLLECTORATE—				
59	Dharwar Town (Municipal)	34,327	25,839		1
60	Hubli do. (do.) ...	69,140	52,067		1
61	Gadag-Betigeri do. (do.) ...	41,158	108,675		1
62	Ranebennur do. (Local Fund) ...	13,930	29,543	.....	
63	In the 13 Rural circles (do.) ...	877,654	194		19
	Total ...	1,036,209	4,606		22
	BIJAPUR COLLECTORATE—				
64	Bijapur Town (Municipal)	32,471	129		1
65	Bagalkot do. (do.)	19,471	393		1
66	In the 8 Rural circles	744,414	42		16
67	Bijapur Prison	.....	.....	M. O.	1
	Total ...	796,356	5,707		18
				M. O.	1

No. I—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
6			7	8	9	10	11	12
Male.	Female.	Total.						
P. 123	147	270	398	270	132	100	239	30
R. 74	49	123						
P. 148	134	282	410	282	206	72	281	1
R. 57	71	128						
P. 665	637	1,302	2,325	1,302	894	350	1,263	37
R. 711	312	1,023						
P. 79	65	144	237	144	102	18	120	23
R. 54	39	93						
P. 14,762	14,835	29,597	2,905	29,597	21,526	6,135	27,923	1,655
R. 16,315	3,469	19,784						
P. 5	3	8	410	8	7	1	8	...
R. 402	.....	402						
P. 15,783	15,821	31,603	2,658	31,603	22,867	6,676	29,834	1,746
R. 17,613	3,940	21,553						
P. 754	730	1,484	5,482	1,484	1,147	285	1,471	7
R. 2,616	1,382	3,998						
P. 1,421	1,358	2,779	3,437	2,779	2,437	314	2,767	12
R. 393	265	658						
P. 808	749	1,557	2,337	1,557	1,260	247	1,518	38
R. 286	494	780						
P. 289	315	604	862	604	308	245	553	51
R. 249	9	258						
P. 13,458	13,239	26,697	2,657	26,697	18,596	6,893	25,768	901
R. 18,361	5,417	23,778						
P. 16,730	16,391	33,121	2,845	33,121	23,748	7,984	32,077	1,009
R. 21,905	7,567	29,472						
P. 586	552	1,138	1,747	1,138	860	248	1,123	13
R. 442	167	609						
P. 291	284	575	884	575	479	89	572	3
R. 278	31	309						
P. 13,412	12,909	26,321	3,296	26,321	17,944	7,435	25,760	546
R. 21,087	5,324	26,421						
P.	.....	...	952	...	...	...	...	...
R. 927	25	952						
P. 14,289	13,745	28,034	2,964	28,034	19,283	7,772	27,455	562
R. 22,744	5,547	28,291						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination
1	2	13	14	15	16	17
	SOUTHERN REGISTRATION DISTRICT.					
	BELGAUM COLLECTORATE—					
53	Gokak Town (Municipal)	123	50	44	99·58	63·29
54	Athani do. (do.)	126	37	12	100·00	31·90
55	Belgaum do. (do.)	1,023	482	226	99·84	60·48
56	Do. Cantonment	93	16	24	99·17	23·19
57	In the 8 Rural circles	19,784	6,278	6,347	99·93	46·72
58	Hindalgi Central Prison	402	325	...	100·00	80·85
	Total ...	21,553	7,188	6,653	99·92	48·24
	DHARWAR COLLECTORATE—					
59	Dharwar Town (Municipal) ...	3,998	1,573	884	99·59	50·51
60	Hubli do. (do.) ...	658	51	346	100·00	16·35
61	Gadag-Betigeri do. (do.) ...	780	140	310	99·93	29·79
62	Ranebennur do. (Local Fund) ...	258	76	65	100·00	39·17
63	In the 13 Rural circles (do.) ...	23,778	6,827	6,833	99·89	40·23
	Total ...	29,472	8,667	8,438	99·89	41·20
	BIJAPUR COLLECTORATE—					
64	Bijapur Town (Municipal)	609	195	46	99·82	34·64
65	Bagalkot do. (do.)	309	149	46	100·00	56·65
66	In the 8 Rural circles	26,421	10,055	7,733	99·94	53·80
67	Bijapur Prison	952	751	65	...	84·67
	Total ...	28,291	11,150	7,890	99·93	54·65

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
28·93	11·11	35·77	308	30·83	6	0·60
23·49	0·35	9·37	344	25·41	1	0·07
46·18	2·84	22·09	1,540	42·52	6	0·17
19·74	15·97	25·81	347	50·37	1	0·15
38·73	5·59	32·06	30,804	34·88	184	0·21
.....	.....	.....	548	.....	.....	.....
38·98	5·52	30·87	33,891	35·68	198	0·21
38·68	0·47	22·11	1,542	44·92	1	0·03
40·76	0·44	52·58	2,739	39·62	2	0·03
40·28	2·44	39·74	1,641	39·87	9	0·22
45·16	8·44	25·19	462	33·17	10	0·72
37·14	3·37	28·76	26,729	30·46	181	0·21
39·32	3·05	28·63	33,113	31·96	203	0·20
40·59	1·14	7·55	1,810	55·74	14	0·43
37·02	0·52	14·89	750	38·52	1	0·05
48·11	2·07	29·27	28,503	38·29	113	0·15
.....	.....	6·83	458	.....	.....	.....
48·48	2·01	27·89	31,521	39·58	128	0·16

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
	SOUTHERN REGISTRATION DISTRICT—*contd.*			
	KANARA COLLECTORATE—			
68	Karwar Town (Municipal)	14,463	1,533	1
69	Kumtha Town (Local Fund)	14,291	1,407	.....
70	In the 11 Rural circles (Local Fund) ...	372,722	102	15
	Total ...	401,476	3,946	16
	TOTAL BY ESTABLISHMENT IN THE SOUTHERN REGISTRATION DISTRICT—			
	Municipal	270,776	.....	7
	Cantonment	6,889	3,369	S. A. S. 1
	Local Funds	2,906,112	.....	67
	Dispensaries	.....	.....	M. Os. 2
	Total ...	3,183,777	.....	74 S. A. S. 1. M. Os. 2
	GUJARAT REGISTRATION DISTRICT.			
	SURAT COLLECTORATE—			
71	Surat City (Municipal)	117,434	39,144	2
72	Rander Town (Local Fund)	10,547	19,531·48	.....
73	Bulsar do. (do.)	19,822	7,928·80	.....
74	In the 9 Rural circles (Local Fund) ...	526,548	320·10	11
75	Medical Staff	.....	.....	.....
	Total ...	674,351	4·08	13

No. I—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
6			7	8	9	10	11	12
Male.		Female.	Total.					
P.	141	150	291	549	291	33	254	287	2
R.	211	47	258					
P.	164	162	326	610	326	42	208	326	...
R.	232	52	284					
P.	5,265	4,336	9,601	1,149	9,601	2,446	5,672	9,374	209
R.	5,320	2,321	7,641						
P.	5,570	4,648	10,218	1,150	10,218	2,521	6,094	9,987	211
R.	5,763	2,420	8,183						
P.	4,937	4,741	9,678	2,509	9,678	7,448	1,919	9,521	148
R.	5,068	2,818	7,886						
P.	79	65	144	237	144	102	18	120	23
R.	54	39	93						
P.	47,350	45,796	93,146	3,557	93,146	60,862	26,538	89,704	3,362
R.	61,574	16,592	78,166						
P.	5	3	8	681	8	7	1	8	...
R.	1,329	25	1,354						
P.	52,371	50,605	102,976	2,474	102,976	68,419	28,526	99,353	3,528
R.	68,025	19,474	87,499						
P.	1,668	1,585	3,243	1,794	3,243	2,267	310	2,569	650
R.	236	109	345						
P.	148	144	292	330	292	90	92	182	110
R.	22	16	38						
P.	141	159	300	330	300	214	67	283	17
R.	25	5	30						
P.	5,200	5,850	12,050	1,211	12,050	7,909	2,593	10,579	1,465
R.	961	312	1,273						
P.	64	52	116	186	116	62	36	107	...
R.	65	5	70						
P.	8,211	7,790	16,001	1,365	16,001	10,532	3,098	13,720	2,242
R.	1,339	447	1,756						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	SOUTHERN REGISTRATION DISTRICT—*contd.*					
	KANARA COLLECTORATE—					
68	Karwar Town (Municipal)	258	134	17	99·31	51·45
69	Kumtha Town (Local Fund)	284	141	61	100·00	68·23
70	In the 11 Rural circles (Local Fund) ...	7,641	3,474	2,136	99·81	63·11
	Total ...	8,183	3,739	2,214	99·80	62·64
	TOTAL BY ESTABLISHMENT IN THE SOUTHERN REGISTRATION DISTRICT—					
	Municipal	7,886	2,801	1,931	99·85	47·04
	Cantonment	93	16	24	99·17	23·19
	Local Funds	78,166	26,851	23,175	99·91	48·83
	Dispensaries	1,354	1,076	65	100·00	83·48
	Total ...	87,499	30,744	25,195	99·90	49·35
	GUJARAT REGISTRATION DISTRICT.					
	SURAT COLLECTORATE—					
71	Surat City (Municipal)	345	29	256	99·07	32·58
72	Randor Town (Local Fund)	36	8	14	100·00	33·33
73	Bulsar do. (do.)	30	1	29	100·00	100·00
74	In the 9 Rural circles (Local Fund) ...	1,273	351	482	99·94	44·37
75	Medical Staff	70	58	...	92·24	82·85
	Total ...	1,756	447	781	99·71	45·84

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
28·42	0·69	6·59	386	26·69	4	0·28
32·68	... ..	21·48	681	47·65	1	0·07
34·47	2·18	27·95	12,748	34·20	116	0·31
34·19	2·06	27·06	13,815	34·41	121	0·30
45·51	1·48	24·49	11,060	40·85	44	0·16
19·74	16·00	25·81	347	50·37	1	0·15
40·11	3·61	29·65	99,927	34·39	605	0·21
.....	.....	4·81	1,006	.....	.....	.....
59·83	3·43	28·79	112,340	35·29	650	0·20
22·12	20·04	74·21	2,784	23·71	412	3·51
18·01	37·67	36·84	196	18·58	15	1·42
14·33	5·67	96·66	485	24·46	26	1·31
20·76	12·16	37·86	14,454	27·45	156	·30
.....	.....	.....	135	.....	.....	.....
21·01	14·01	44·47	18,054	26·77	609	·90

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
	GUJARAT REGISTRATION DISTRICT—*contd.*			
	BROACH COLLECTORATE—			
76	Broach City (Municipal)	42,648	25,325·71	1
77	Jambusar Town (Local Fund)	10,217	18,916·66	...
78	Ankleshwar do. (do.)	11,762	3,078·53	...
79	In the 6 Rural Circles (Local Fund) ...	243,118	166·29	5
80	Medical Staff	.....	.....	.....
	Total ...	307,745	210	6
	KAIRA COLLECTORATE—			
81	Kaira Town (Local Fund)... ...	8,277	29,560·71	...
82	Mehmedabad Town (do.)... ...	6,238	51,983·33	...
83	Nadiad Town (Municipal)	31,939	96,784·84	1
84	Borsad do. (Local Fund)	12,116	63,768·42	...
85	Anand do. (do.)	11,054	10,732·04	...
86	Umroth do. (do.)	14,024	181·88	...
87	Dakore do. (do.)	7,990	1,336·12	...
88	Kapadvanj Town (do.)	14,794	64,321·73	...
89	In the 7 Rural Circles (Local Fund) ...	604,550	382·60	10
	Medical Staff	.....	.....	.....
	Total ...	710,982	445	11
	PANCH MAHALS COLLECTORATE—			
90	Godhra Town (Local Fund)	26,979	158,700·8	...
91	Dohad do. (do.)	16,076	94,564·71	...
92	In the 5 Rural Circles (Local Fund) ...	331,805	206·65	7
93	Medical Staff	.....	.....	.....
	Total ...	374,860	233	7

No. I—*contd.*

Total number of persons vaccinated.				Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
					Total.	Successful.			Unknown.
						Under one year.	One and under six years.	Total of all ages.	
	6			7	8	9	10	11	12
	Male.	Female.	Total.						
P.	800	752	1,552	1,685	1,552	1,305	153	1,463	77
R.	86	45	133						
P.	115	100	215	230	215	148	34	182	33
R.	9	6	15						
P.	145	162	307	325	307	198	37	235	70
R.	11	7	18						
P.	3,738	3,475	7,213	1,527	7,213	5,255	1,064	6,329	844
R.	341	84	425						
P.	36	21	57	291	57	29	17	56	...
R.	162	72	234						
P.	4,834	4,510	9,344	1,694	9,344	6,935	1,305	8,265	1,024
R.	611	214	825						
P.	61	64	125	269	125	107	12	120	3
R.	40	103	143						
P.	89	79	168	180	168	129	30	159	8
R.	8	4	12						
P.	465	375	840	943	840	595	93	688	152
R.	57	46	103						
P.	209	196	405	432	405	382	25	357	45
R.	19	8	27						
P.	182	166	348	349	348	219	98	317	31
R.	1	.....	1						
P.	136	101	237	369	237	177	40	219	18
R.	89	43	132						
P.	73	72	145	165	145	116	15	131	14
R.	17	3	20						
P.	198	182	380	394	380	290	75	365	15
R.	8	6	14						
P.	7,141	6,507	13,648	1,457	13,650	10,432	1,892	12,342	1,244
R.	651	280	931						
P.	5	.....	5	5	5	4	1	5	...
R.	.....	.....	...						
P.	8,559	7,742	16,301	1,607	16,303	12,401	2,281	14,703	1,580
R.	890	493	1,383						
P.	684	542	1,226	1,449	1,226	1,006	52	1,059	165
R.	214	9	223						
P.	177	180	357	374	357	283	47	330	25
R.	13	4	17						
P.	5,512	5,278	10,790	1,591	10,793	7,355	2,306	9,675	1,066
R.	230	121	351						
P.	73	62	125	158	125	65	48	116	5
R.	46	17	63						
P.	6,446	6,052	12,498	1,878	12,501	8,709	2,453	11,180	1,
R.	508	151	654						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination
1	2	13	14	15	16	17
	GUJARAT REGISTRATION DISTRICT—*contd.*					
	BROACH COLLECTORATE—					
76	Broach City (Municipal)	133	25	50	99·18	30·12
77	Jambusar Town (Local Fund)	15	1	7	100·00	12·50
78	Ankleshwar do. (do.)	18	...	13	99·15	...
79	In the 6 Rural Circles (Local Fund) ...	425	100	75	99·37	28·57
80	Medical Staff	234	143	...	98·25	61·11
	Total ...	825	269	145	99·34	39·56
	KAIRA COLLECTORATE—					
81	Kaira Town (Local Fund) ...	143	54	32	98·36	48·65
82	Mehmedabad Town (do.) ...	12	1	1	99·37	9·09
83	Nadiad Town (Municipal)	103	8	83	100·00	40·00
84	Borsad do. (Local Fund)	27	8	13	99·17	57·14
85	Anand do. (do.)	1	...	...	100·00	...
86	Umreth do. (do.)	132	1	20	100·00	·89
87	Dakore do. (do.)	20	9	4	100·00	56·25
88	Kapadvanj Town (do.)	14	3	6	100·00	37·50
89	In the 7 Rural Circles (Local Fund) ...	931	143	305	99·48	22·84
	Medical Staff	...	...	...	100·00	...
	Total ...	1,383	227	464	99·52	24·64
	PANCH MAHALS COLLECTORATE—					
90	Godhra Town (Local Fund)	223	15	178	99·81	33·33
91	Dohad do. (do.)	17	...	6	99·39	...
92	In the 5 Rural Circles (Local Fund) ...	351	81	72	99·47	28·81
93	Medical Staff	63	18	...	96·67	28·57
	Total ...	654	114	256	99·47	28·14

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
34·89	4·96	37·59	1,321	30·91	42	·98
17·91	15·35	46·67	300	29·39	4	·39
19·98	22·80	72·22	309	26·27	9	·77
26·44	11·70	17·65	6,860	28·22	79	·32
.....	.....	.....	17	.....	not available.	
27·73	10·96	17·57	8,807	28·62	134	·43
21·02	2·40	22·38	206	24·89	3	·36
25·65	4·76	8·33	201	32·22	4	·64
21·79	18·10	80·58	872	27·30	64	2·00
30·13	11·11	48·14	434	35·82	9	·74
28·58	8·91	.....	398	36·00	8	·72
15·69	7·59	15·15	407	29·02	2	·14
17·52	9·65	20·00	182	22·77	11	1·38
24·88	3·95	42·85	432	29·20	1	·07
20·65	9·11	32·76	17,345	28·69	73	·12
.....	.....	.....	1	.....	not available.	
21·00	9·38	33·55	20,478	28·80	175	·24
39·81	13·46	79·82	1,058	39·03	11	·41
20·53	7·00	35·29	427	26·56	8	·50
29·40	9·88	20·61	9,928	29·92	59	·18
.....	.....	.....	43	.....	.....	.....
30·12	10·09	39·14	11,451	30·54	78	·21

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
	GUJARAT REGISTRATION DISTRICT—*contd.*			
	AHMEDABAD COLLECTORATE—			
94	Ahmedabad City (Municipal)	270,775	41,657·69	4
95	Dhandhuka Town (Local Fund)... ...	8,056	42,280·00	.....
96	Viramgam do. (do.)... ...	26,262	43,052·46	.....
97	Dholka do. (do.)... ...	12,513	16,684·00	.....
98	Ahmedabad Cantonment (Sadar Bazar Dispensary)	3,232	1,103·07	.....
99	In the 8 Rural Circles (Local Fund) ...	570,073	149·51	12
100	Ahmedabad Central Prison	.....	.....	.....
101	Medical Staff	.....	.....	.....
	Total ...	890,911	233	16
	TOTAL BY ESTABLISHMENT IN THE GUJARAT REGISTRATION DISTRICT.			
	Municipal	679,523	59,037·62	8
	Local Fund	2,276,094	204·23	46
	Cantonment	3,232	1,103·07	.....
	Dispensaries	.....	.....	.....
	Total ...	2,958,849	264	54

No. I—*contd.*

Total number of persons vaccinated.				Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
					Total.	Successful.			Unknown.
						Under one year.	One and under six years.	Total of all ages.	
6				7	8	9	10	11	12
Male.		Female.	Total.						
P.	5,055	4,828	9,883	2,632	10,033	8,941	493	9,439	419
R.	466	182	648						
P.	197	153	350	376	350	227	97	324	26
R.	20	6	26						
P.	261	270	531	554	531	318	65	383	146
R.	21	2	23						
P.	141	128	269	281	269	206	11	217	52
R.	6	6	12						
P.	...	.....	...	...	...	...	...	...	...
R.	...	.....	...						
P.	7,913	7,577	15,550	1,397	15,552	11,788	1,677	13,477	2,005
R.	881	336	1,217						
P.	...	...	...	1,281	...	...	...	...	...
R.	1,240	41	1,281						
P.	78	56	134	173	134	101	24	127	3
R.	39	1	39						
P.	13,705	13,012	26,717	1,873	26,859	21,581	2,367	23,967	2,651
R.	2,672	574	3,246						
P.	7,973	7,540	15,518	2,093	15,658	13,098	1,049	14,159	1,298
R.	847	392	1,239						
P.	33,521	31,385	64,906	1,518	64,913	46,799	10,320	57,265	7,402
R.	3,587	1,361	4,948						
P.	...	...	...	...	...	...	...	...	....
R.	...	...	...						
P.	256	181	437	...	437	261	126	411	8
R.	1,551	136	1,687						
P.	41,755	39,106	80,851	1,643	81,008	60,158	11,504	71,835	8,708
R.	5,985	1,879	7,864						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	GUJARAT REGISTRATION DISTRICT—*concld.*					
	AHMEDABAD COLLECTORATE—					
94	Ahmedabad City (Municipal)	649	29	565	98·28	34·52
95	Dhandhuka Town (Local Fund)... ...	26	3	5	100·00	14·28
96	Viramgam do. (do.)... ...	23	2	11	99·48	16·66
97	Dholka do. (do.)... ...	12	2	6	100·00	33·33
98	Ahmedabad Cantonment (Sadar Bazar Dispensary)	...	...	...	...	...
99	In the 8 Rural Circles (Local Fund) ...	1,217	275	376	99·48	32·70
100	Ahmedabad Central Prison	1,281	922	213	...	86·33
101	Medical Staff	39	2	20	96·95	10·53
	Total ...	3,247	1,235	1,196	99·00	60·91
	TOTAL BY ESTABLISHMENT IN THE GUJARAT REGISTRATION DISTRICT.					
	Municipal	1,230	91	954	98·60	32·97
	Local Fund	4,948	1,058	1,655	99·57	31·18
	Cantonment	...	...	...	...	...
	Dispensaries	1,687	1,143	233	95·80	78·61
	Total ...	7,865	2,292	2,842	99·36	45·63

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
34·97	4·18	87·06	8,393	32·84	221	·82
40·59	7·43	19·23	298	36·99	7	·87
33·90	27·49	47·62	600	22·84	42	1·60
17·59	19·33	50·00	485	38·76	11	·88
.....	.....	.....	.....	.....	2	·62
34·12	12·89	30·89	15,901	27·89	149	·26
.....	.....	16·63	2,285	.....	not available.	
.....	2·24	51·28	73	.....	.....	.....
28·29	9·87	36·85	28,585	32·02	432	·48
20·37	8·29	77·56	20,283	29·84	910	1·35
25·62	11·40	33·45	64,488	28·83	516	·23
.....	.....	.....	.....	.....	2	·62
.....	1·83	13·81	2,554	.....	not available.	
25·05	10·75	36·13	87,325	29·51	1,428	·48

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
	SIND REGISTRATION DISTRICT.			
	KARACHI COLLECTORATE—			
102	Karachi Town (Municipal)	216,883	2,363	5
103	Tatta do. (do.)	8,470	.....	.....
104	In the 11 Rural Circles (Local Fund) ...	316,712	48	11
105	Medical staff	.....	.....	.....
	Total ...	542,065	47	16
	HYDERABAD COLLECTORATE—			
106	Hyderabad Town (Municipal)	73,951	4,167	1
107	Do. Cantonment	7,887		1
108	In the 7 Rural Circles (Local Fund) ...	491,612	.....	10
109	Medical staff	.....	.....	.....
	Total ...	573,450	128	12
	NAWABSHAH COLLECTORATE—			
110	In the 7 Rural Circles (Local Fund) ...	418,660	107	9
111	Medical Staff	.....	.....	.....
	Total ...	418,660	107	9
	THAR AND PARKAR COLLECTORATE—			
112	Umarkot Town (Local Fund)	4,199	.....	.....
113	In the 11 Rural Circles (Local Fund) ...	392,132	29	15
	Total ...	396,331	29	15
114	LARKANA COLLECTORATE—			
115	Larkana Town (Municipal)	17,723	8,023	1
116	In the 11 Rural Circles (Local Fund) ...	580,237	115	10
117	Medical staff	.....	.....	.....
	Total ...	597,960	118	11

No. I—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.			
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
6			7	8	9	10	11	12
Male.	Female.	Total.						
P. 5,181	5,034	10,215	3,443	10,333	5,459	2,077	8,317	1,818
R. 5,301	1,699	7,000						
P. 94	61	155	.....	155	59	39	131	24
R. 85	3	88						
P. 4,489	3,812	8,301	946	8,301	3,040	4,214	7,817	484
R. 1,528	337	1,865						
P. 281	60	341	...	341	10	16	242	85
R. 649	78	727						
P. 10,045	8,967	19,012	1,727	19,030	8,568	6,346	16,507	2,411
R. 7,563	2,117	9,680						
P. 1,443	1,212	2,655	3,634	2,660	1,138	1,279	2,519	105
R. 713	266	979						
P. 51	33	84	220	84	31	43	83	1
R. 97	39	136						
P. 7,550	6,058	13,608	1,731	13,608	5,699	6,354	12,958	649
R. 3,285	420	3,705						
P. 330	13	343	...	343	8	13	336	...
R. 1,675	27	1,702						
P. 9,374	7,316	16,690	1,764	16,695	6,876	7,689	15,896	755
R. 5,770	752	6,522						
P. 7,534	6,228	13,762	2,091	13,764	7,094	5,426	13,144	615
R. 4,396	664	5,060						
.....	.....	...	.....	...	...	...	...	...
P. 7,534	6,228	13,762	2,091	13,764	7,094	5,426	13,144	615
R. 4,396	664	5,060						
P. 91	69	160	.....	160	78	58	148	12
R. 35	26	61						
P. 7,162	6,051	13,213	1,260	13,214	6,687	5,405	12,692	517
R. 4,061	1,401	5,462						
P. 7,253	6,120	13,373	1,260	13,374	6,765	5,463	12,840	529
R. 4,096	1,427	5,523						
P. 338	269	607	722	607	174	414	592	15
R. 96	19	115						
P. 7,801	6,303	14,104	1,836	14,104	8,025	4,754	13,365	737
R. 3,936	316	4,252						
P. 1	.....	1	.....	1	...	1	1	...
R. 7	1	8						
P. 8,140	6,572	14,712	1,734	14,712	8,199	5,169	13,958	752
R. 4,039	336	4,375						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	SIND REGISTRATION DISTRICT.					
	KARACHI COLLECTORATE—					
102	Karachi Town (Municipal)	7,000	...	7,000	98·84	...
103	Tatta do. (do.)	88	41	25	100·00	65·08
104	In the 11 Rural Circles (Local Fund) ...	1,865	506	515	100·00	37·48
105	Medical staff	727	222	85	94·53	34·58
	Total ...	9,680	769	7,625	99·33	37·42
	HYDERABAD COLLECTORATE—					
106	Hyderabad Town (Municipal)	980	95	640	98·60	27·94
107	Do. Cantonment	136	84	15	100·00	69·42
108	In the 7 Rural Circles (Local Fund) ...	3,705	1,039	1,008	99·99	38·45
109	Medical staff	1,702	1,342	4	97·96	79·03
	Total ...	6,523	2,560	1,662	99·72	52·66
	NAWABSHAH COLLECTORATE—					
110	In the 7 Rural Circles (Local Fund) ...	5,062	1,501	1,408	99·96	41·08
	Medical Staff	...	...	...	...	...
	Total ...	5,062	1,501	1,408	99·96	41·08
111	THAR AND PARKAR COLLECTORATE—					
112	Umarkot Town (Local Fund)	61	23	4	100·00	40·35
113	In the 11 Rural Circles (Local Fund) ...	5,462	1,251	1,650	99·96	32·82
	Total ...	5,523	1,274	1,654	99·96	32·93
114	LARKANA COLLECTORATE—					
115	Larkana Town (Municipal)	115	28	61	100·00	51·85
116	In the 11 Rural Circles (Local Fund) ...	4,252	1,132	1,657	99·99	4·36
117	Medical staff	8	...	...	100·00	...
	Total ...	4,375	1,160	1,718	99·99	43·66

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
38·35	17·77	100·00	7,312	33·71	92	·42
20·31	15·49	28·41	150	17·71	13	1·53
26·28	5·83	27·61	73·57	23·23	75	·24
.....	24·93	80·47	.....	.....	.....	.....
31·87	12·67	78·77	14,939	27·56	181	·33
35·35	3·95	65·31	2,242	27·40	21	·29
21·17	1·19	11·03				
28·47	4·77	27·07	11,212	22·81	19	·04
.....	.....	·24	.....	.....	.....	.....
32·18	4·52	25·48	14,029	24·46	40	·07
34·98	4·65	27·81	11,153	26·64	102	·24
.....	.....	.....	.....	.....	.....	.....
34·98	4·65	27·81	11,153	26·64	102	·24
40·72	7·50	6·56	96	22·86	.....	.....
35·56	3·91	30·21	12,153	30·99	87	·22
35·61	3·95	29·27	12,270	30·96	87	·22
34·32	2·47	53·04	501	28·27	7	·40
24·98	5·23	38·95	14,421	24·85	148	·26
.....	.....	.....	.....	.....	.....	.....
25·28	5·11	39·41	14,922	24·95	155	·26

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of Vaccinators employed throughout the year.
1	2	3	4	5
	SIND REGISTRATION DISTRICT—*contd.*			
	SUKKUR COLLECTORATE—			
118	Sukkur Town (Municipal)	42,759	11,638	1
119	Shikarpur do. (do.)	55,503	5,994	1
120	Rohri do. (do.)	11,378	.....	1
121	In the 8 Rural Circles (Local Fund) ...	400,652	71	8
122	Medical Staff	.....	.....	.....
	Total ...	510,292	91	11
	UPPER SIND FRONTIER—			
123	Jacobabad Town (Municipal)	10,583	.....	1
124	In the 5 Rural Circles (Local Fund) ...	230,036	86	5
125	Medical Staff	.....	.....	.....
	Total ...	240,619	90	6
	TOTAL BY ESTABLISHMENT IN THE SIND REGISTRATION DISTRICT—			
	Municipal	437,250	3,761	11
	Local Fund	2,834,240	61	68
	Cantonment	7,887	.....	.....
	Dispensaries	.....	.....	.....
	Total ...	3,279,377	75	80

No. I—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Total.	Successful.			Unknown.
					Under one year.	One and under six years.	Total of all ages.	
6			7	8	9	10	11	12
Male.	Female.	Total.						
P. 530	450	980	1,159	986	604	343	954	20
R. 134	45	179						
P. 659	610	1,269	1,462	1,270	834	368	1,206	63
R. 134	59	193						
P. 108	107	215	240	215	124	90	215	...
R. 15	10	25						
P. 6,273	5,417	11,690	2,736	11,690	7,035	3,237	10,597	1,093
R. 8,833	1,372	10,205						
P. 504	29	533	.....	533	11	16	386	73
R. 2,485	44	2,529						
P. 8,074	6,613	14,687	2,251	14,694	8,608	4,054	13,358	1,249
R. 11,601	1,530	13,131						
P. 159	129	288	492	288	150	81	240	48
R. 175	29	204						
P. 4,173	3,633	7,806	1,854	7,807	4,279	2,919	7,375	432
R. 1,179	285	1,464						
P.	.....	...	.....	...	...	...	...	...
R. 30	.....	30						
P. 4,332	3,762	8,094	1,627	8,095	4,429	3,000	7,615	480
R. 1,384	314	1,698						
P. 8,512	7,872	16,384	2,286	16,414	8,542	4,691	14,174	2,093
R. 6,653	2,130	8,783						
P. 45,073	37,571	82,644	1,687	82,648	41,937	32,367	78,096	4,539
R. 27,253	4,821	32,074						
P. 51	33	84	220	84	31	43	83	1
R. 97	39	136						
P. 1,116	102	1,218	.....	1,218	29	46	965	158
R. 4,846	150	4,996						
P. 54,762	45,578	100,330	1,825	100,364	50,589	37,147	93,318	6,791
R. 38,849	7,140	45,989						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	SIND REGISTRATION DISTRICT—*contd.*					
	SUKKUR COLLECTORATE—					
118	Sukkur Town (Municipal)	179	13	109	98·76	18·57
119	Shikarpur do. (do.)	193	55	82	100·00	49·55
120	Rohri do. (do.)	25	5	9	100·00	31·25
121	In the 8 Rural Circles (Local Fund) ...	10,205	2,306	4,654	100·96	41·54
122	Medical staff	2,529	1,268	673	83·21	68·32
	Total ...	13,131	3,647	5,527	99·37	47·96
	UPPER SIND FRONTIER—					
123	Jacobabad Town (Municipal)	204	9	21	100·00	4·92
124	In the 5 Rural Circles (Local Fund) ...	1,464	390	544	100·00	42·38
125	Medical Staff	30	...	30	...	...
	Total ...	1,698	399	595	100·00	36·17
	TOTAL BY ESTABLISHMENT IN THE SIND REGISTRATION DISTRICT—					
	Municipal	8,784	246	7,947	98·96	29·89
	Local Fund	32,076	8,148	11,435	99·97	39·47
	Cantonment	136	84	15	100·00	69·42
	Dispensaries	4,996	2,832	792	91·04	6·73
	Total ...	45,992	11,310	20,189	99·73	43·83

No. I—*contd.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
22·61	2·03	60·83	1,040	24·32	15	·35
22·72	4·96	42·49	1,368	24·54	37	·67
19·34	.....	36·00	284	24·96	3	·26
32·23	9·34	45·61	12,052	30·08	56	·14
.....	13·70	26·61	.....	.....	.....	.....
52·92	8·52	42·09	14,940	29·28	111	·22
23·53	16·66	10·29	289	27·31	5	·47
33·76	5·53	37·16	7,486	32·54	11	·05
.....	.....	100·00	.....	.....	.....	.....
33·31	5·93	35·04	7,776	32·32	15	·06
32·98	12·75	90·47	13,153	30·08	202	·46
30·43	5·05	35·65	75,902	22·68	525	·19
21·17	1·19	11·03	.....	.....	.....	.....
.....	12·97	15·85	.....	.....	.....	.....
31·90	6·77	43·90	89,055	27·16	727	·21

STATEMENT

No.	Circles and Districts.	Population of District according to census of 1921.	Average population per square mile.	Average number of vaccinators employed throughout the year.
1	2	3	4	5
	ADEN.			
126	Aden (Municipal)	54,425	686	8
	TOTAL BY ESTABLISHMENTS.			
	Municipal	3,347,080	...	61
	Local Fund	15,995,425	129	344
	Cantonments	95,759	...	2 1 S.A.S.
	Dispensaries	...	...	..... 10 S.A.S.
	Grand Total ...	19,438,264	...	407 11 S.A.S.

Sum

	Total number of persons vaccinated.		Total number of operations performed.		Percentage of successful cases in which results were known.	
	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.
By Special Staff (Statement I).	592,709	320,365	592,890	320,369	99·77	55·89
By Dispensary Staff ...	1,902	10,979	1,902	10,979	90·89	63·88
Total ...	5,94,611	331,344	594,792	331,348	99·77	55·89

No. I—*contd.*

Total number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.				
				Successful.				
				Total.	Under one year.	One and under six years.	Total of all ages.	Unknown.
6			7	8	9	10	11	12
Male.	Female.	Total.						
P. 8,656	785	9,441	1,825	9,441	345	230	575	8,866
R. 5,161	.....	5,161						
Males.	Females.	Total.						
P. 51,679	42,628	94,307	2,345	94,477	59,558	16,490	77,542	16,432
R. 36,235	12,533	48,768						
P. 256,216	240,844	497,060	2,231	497,071	322,526	119,806	451,603	44,910
R. 217,547	52,989	270,536						
P. 689	653	1,342	801	1,342	1,112	148	1,269	59
R. 854	207	1,061						
P. 1,543	359	1,902	1,288	1,902	380	267	1,577	167
R. 10,493	481	10,979						
P. 310,127	284,484	594,611	2,215	594,792	383,576	136,711	531,991	61,568
R. 265,134	66,210	331,344						

mary.

Average number of persons vaccinated by each Vaccinator.		Number of children successfully vaccinated.		Ratio of successful vaccinations per 1,000 of population.	Total cost of Department.	Average cost of each successful case.
Vaccinators employed.	Persons vaccinated by each vaccinator.	Under one year.	One and under six years.			
					Rs. a. p.	Rs. a. p.
407	2,215	383,196	136,444	32·37	...	...
1 S.A.S.						
10 S.A.S.	1,288	380	267	...	...	...
407	2,215	383,576	136,711	32·37	6,57,640 8 7	1 0 9
11 S.A.S.						

STATEMENT

No.	Circles and Districts.	Re-vaccination.			Percentage of successful cases in which the results were known.	
		Total.	Successful.	Unknown.	Primary.	Re-vaccination.
1	2	13	14	15	16	17
	ADEN—*contd.*					
126	Aden (Municipal)	5,161	1	5,160	100·00	100·00
	TOTAL BY ESTABLISHMENTS.					
	Municipal	48,770	6,454	36,551	99·36	59·92
	Local Fund	270,538	33,999	119,437	99·88	55·69
	Cantonments	1,061	456	320	98·91	61·54
	Dispensaries	10,979	6,308	1,104	90·89	63·88
	Grand Total ...	331,348	97,217	157,412	99·77	55·99

No. I—*concld.*

Persons successfully vaccinated per 1,000 of population.	Percentage of unknown cases to total cases.		Average annual number of persons successfully vaccinated during previous five years.		Average annual number of deaths from small-pox during previous five years.	
	Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
18	19	20	21	22	23	24
10·53	91·79	100·00	2,908	53·43	38	·70
25·10	17·40	74·95	90,880	27·45	1,876	·56
33·48	9·03	44·15	475,066	29·70	3,107	·19
18·01	4·40	30·16	2,819	29·44	10	·10
...	8·78	10·06	.....	...	...	...
·37	10·35	47·51	573,917	29·53	4,760	·24

STATEMENT

Showing the Cost of the Department in the

No.	Circles and Districts.											EXPEN
						European Supervising Officers.	Pay.			Inspectors of Sanitation and Vaccination.	Pay.	
	WESTERN REGISTRATION DISTRICT.						Rs.	a.	p.		Rs.	a. p.
	Administrative Charges				...	1	19,800	0	0	8	8,202	4 0
1	East Khandesh	Collectorate		...	...	...	.....			.....	.....	
2	West Khandesh	do.		...	...	...	.....			.....	.....	
3	Nasik	do.		...	...	...	.....			.....	.....	
4	Thana	do.		...	...	...	.....			.....	.....	
5	Bombay Suburban	do.		...	...	...	.....			.....	.....	
6	Kolaba	do.		...	...	...	.....			.....	.....	
			Total		...	1	19,800	0	0	8	8,202	4 0
7	Bombay City	...	...		...	1	4,227	12	0	1	1,836	15 0
	CENTRAL REGISTRATION DISTRICT.											
	Administrative Charges				...	1	12,343	13	0	6	8,520	11 0
8	Ahmednagar	Collectorate			...	...	.....			.....	.....	
9	Poona	do.			...	...	.....			.....	.....	
10	Sholapur	do.			...	...	.....			.....	.....	
11	Satara	do.			...	...	.....			.....	.....	
12	Ratnagiri	do.			...	...	.....			.....	.....	
			Total		...	1	12,343	13	0	6	8,520	11 0
	SOUTHERN REGISTRATION DISTRICT.											
	Administrative Charges				...	1	11,199	12	0	7	9,895	11 0
13	Belgaum	Collectorate	...		...	...	.....			.....	.....	
14	Dharwar	do.	...		...	...	.....			.....	.....	
15	Bijapur	do.	...		...	...	.....			.....	.....	
16	Kanara	do.	...		...	...	.....			.....	.....	
			Total		...	1	11,199	12	0	7	9,895	11 0

No. II.

Bombay Presidency during the year 1930-31.

DITURE.

Vaccinators.	Pay.	Clerks.	Pay.	Peons, etc.	Pay.	Total Pay of Establishment.
	Rs. a. p.		Rs. a. p.		Rs. a. p.	Rs. a. p.
.....	.....	2	3,444 3 0	12	2,109 4 0	33,555 11 0
22	9,968 6 0	.....	.....	20	3,531 6 0	13,499 12 0
16	8,206 9 0	.....	.....	15	3,081 0 0	11,287 9 0
22	9,624 8 0	.....	.....	20	3,301 12 6	12,926 4 6
22	9,404 5 0	.....	.....	20	3,484 3 0	12,888 8 0
4	2,606 2 0	.....	.....	4	1,034 2 0	3,640 4 0
17	6,798 3 0	.....	.....	16	2,351 1 0	9,149 4 0
103	46,608 1 0	2	3,444 3 0	107	18,892 12 6	96,947 4 6
9	10,838 1 0	6	11,867 15 0	28	10,236 15 0	39,007 10 0
.....	.....	2	2,205 0 0	10	1,880 1 0	24,949 9 0
19	9,155 9 0	.....	.....	19	3,078 2 0	12,233 11 0
20	10,491 11 0	.....	.....	21	4,011 1 0	14,502 12 0
16	7,768 11 0	.....	.....	15	2,799 6 0	10,568 1 0
22	10,828 2 0	.....	.....	20	3,409 7 8	14,237 9 8
22	10,557 11 0	.....	.....	21	3,779 1 0	14,336 12 0
99	48,801 12 0	2	2,205 0 0	106	18,957 2 8	90,828 6 8
.....	.....	1	1,367 12 0	10	1,775 11 0	24,238 14 0
18	8,661 9 0	.....	.....	18	3,021 9 0	11,683 2 0
22	11,133 0 0	.....	.....	22	3,653 12 0	14,786 12 0
17	8,437 9 11	.....	.....	17	2,759 8 11	11,197 2 10
16	8,207 4 0	.....	.....	16	2,645 3 0	10,852 7 0
73	36,439 6 11	1	1,367 12 0	83	13,855 11 11	72,758 5 10

STATEMENT

No.	Circles and Districts.	EXPENDITURE—*contd.* Travelling Allowances.	Contingencies.	Total Cost.	Imperial Funds
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	WESTERN REGISTRATION DISTRICT.				
	Administrative Charges ...	9,369 5 0	1,094 5 0	43,959 5 0	.....
1	East Khandesh Collectorate ...	5,350 6 0	1,068 12 8	19,918 14 8	.....
2	West Khandesh. do. ...	5,079 14 0	480 11 9	16,798 2 9	.....
3	Nasik do. ...	4,752 15 0	806 3 9	18,485 7 3	.....
4	Thana do. ...	4,669 12 3	1,130 2 2	18,690 6 5	.....
5	Bombay Suburban do. ...	552 9 0	214 9 7	4,407 6 7	.....
6	Kolaba do. ...	3,474 7 0	418 14 9	13,042 9 9	.....
	Total ...	33,249 4 3	5,103 11 8	1,35,300 4 5	.....
7	Bombay City	689 13 0	22,491 7 2	62,188 14 2	.....
	CENTRAL REGISTRATION DISTRICT.				
	Administrative Charges ...	6,967 12 0	1,785 13 0	33,703 2 0	.....
8	Ahmednagar Collectorate ...	4,748 15 0	935 0 6	17,917 10 6	.....
9	Poona do. ...	4,441 8 0	886 13 10	19,881 1 10	.....
10	Sholapur do ...	3,484 1 6	597 3 11	14,649 6 5	.....
11	Satara do. ...	5,316 5 0	741 11 11	20,295 10 7	.....
12	Ratnagiri do. ...	3,364 14 0	493 11 0	18,195 5 0	.....
	Total ...	28,323 7 6	5,440 6 2	1,24,592 4 4	.....
	SOUTHERN REGISTRATION DISTRICT.				
	Administrative Charges ...	6,857 9 0	1,204 14 6	32,301 5 6	.....
13	Belgaum Collectorate	*5,166 15 0	740 2 8	17,590 3 8	.....
14	Dharwar do.	†5,787 9 0	885 7 5	21,459 12 5	.....
15	Bijapur do.	‡4,517 0 1	825 7 9	16,599 10 8	.....
16	Kanara do.	2,052 8 0	496 13 6	13,401 12 6	.....
	Total ...	24,381 9 1	4,212 13 10	1,01,352 12 9	.....

* This amount is paid by the Belgaum Cantonment
† These amounts include the pony allowance to the
‡ These amounts include the fixed and conveyance

No. II—*contd.*

Paid from				Total.	Number of all successful Vaccinations and Re-Vaccinations.	Average cost of each successful case.
Provincial Funds.	Local Funds.	Municipalities.	Indian States.			
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.
43,959 5 0	.....	.....	.....	43,959 5 0	...	.....
4,631 0 0	12,682 3 7	2,605 11 1	.....	19,918 14 8	29,811	0 10 8
3,193 1 9	11,603 3 6	2,001 13 6	.....	16,798 2 9	20,632	0 12 4
4,283 11 0	12,469 13 9	1,731 14 6	.....	18,485 7 3	26,522	0 11 1
3,564 6 0	13,432 13 2	1,691 3 3	.....	19,333 11 11	21,833	0 13 5
408 0 0	1,758 8 1	2,240 14 6	.....	4,407 6 7	4,444	0 15 10
3,198 11 0	9,843 14 9	.....	.....	14,346 7 9	20,200	0 10 0
63,238 2 9	61,790 8 10	10,271 8 10	.....	1,35,300 4 5	123,442	1 1 1
.....	.....	62,188 14 2	.....	62,188 14 2	16,662	3 11 9
33,703 2 0	.....	.....	.....	33,703 2 0	...	.....
3,402 4 0	13,633 6 6	882 0 0	.....	17,917 10 6	37,962	0 7 6
2,833 8 0	12,704 4 9	4,293 5 1	.....	19,831 1 10	30,924	0 10 3
1,125 15 0	9,958 6 6	3,565 0 11	.....	14,649 6 5	30,486	0 7 8
3,935 7 0	15,577 14 5	782 5 2	.....	20,295 10 7	32,697	0 9 11
3,464 1 0	14,731 4 0	.....	.....	18,195 5 0	46,157	0 6 4
48,464 5 0	66,605 4 2	9,522 11 2	.....	1,24,592 4 4	178,226	0 11 2
32,301 5 6	.....	.....	.....	32,301 5 6	...	.....
2,505 11 0	14,163 14 2	920 10 6	.....	17,590 3 8	36,689	0 7 8
3,127 4 0	15,926 0 5	2,406 8 0	.....	21,459 12 5	40,744	0 8 5
1,452 0 0	14,322 1 10	825 8 10	.....	16,599 10 8	37,854	0 7 0
3,867 15 0	8,785 13 6	748 0 0	.....	13,401 12 6	13,726	0 15 7
43,254 3 6	53,197 13 11	4,900 11 4	.....	1,01,352 12 9	129,013	0 12 7

to the Medical Officer in charge, Cantonment dispensary.
Vaccrs.
allowances paid to Vaccrs.

STATEMENT

EXPEN

No.	Circles and Districts.	European Supervising Officers.	Pay.	Inspectors of Sanitation and Vaccination.	Pay.
	GUJARAT REGISTRATION DISTRICT.		Rs. a. p.		Rs. a. p.
	Administrative Charges ...	1	4,585 9 0	5	6,979 0 0
17	Surat Collectorate	...	.....	.....	.....
18	Broach do.	...	...	.....	.....
19	Kaira do.	...	.....	.....	.....
20	Panch Mahals Collectorate ...	...	.....	.....	.....
21	Ahmedabad do. ...	...	.....	1	.....
	Total ...	1	4,585 9 0	6	6,979 0 0
	SIND REGISTRATION DISTRICT.				
	Administrative Charges ...	1	11,587 15 0	7	7,121 6 0
22	Karachi Collectorate	...	.....	.....	.....
23	Hyderabad do.	...	.....	.....	.....
24	Nawabshah do.	...	.....	.....	.....
25	Thar and Parkar do.	...	.....	.....	.....
26	Larkana do.	...	.....	.....	.....
27	Sukkur do.	...	.....	.....	.....
28	Jacobabad do.	...	.....	.....	.....
	Total ...	1	11,587 15 0	7	7,121 6 0
	VACCINE INSTITUTE.				
29	Belgaum	1	16,570 15 0	3	6,378 11 0
30	Aden	...	.....	.....	.....
	TOTAL OF PRESIDENCY		80,315 12 0	.....	48,934 10 0

No. II—*contd.*

DITURE.

Vaccinators.	Pay.	Clerks.	Pay.	Peons, etc.	Pay.	Total Pay of Establishment.
	Rs. a. p.		Rs. a. p.		Rs. a. p.	Rs. a. p.
.....	.....	2	3,603 14 0	9	1,599 5 0	16,767 12 0
15	6,909 0 0	.....	.....	14	2,586 1 0	9,495 1 0
7	3,254 6 0	.....	.....	6	1,038 14 0	4,293 4 0
12	5,494 8 0	.....	.....	11	1,955 4 0	7,449 12 0
8	3,527 6 0	.....	.....	7	1,259 1 0	4,786 7 0
18	8,933 2 0	1	432 0 0	18	3,525 1 0	12,890 3 0
60	28,118 6 0	3	4,035 14 0	65	11,963 10 0	55,682 7 0
.....	.....	3	4,273 5 0	10	2,018 1 0	25,000 11 0
17	9,780 0 0	1	1,435 0 0	16	4,251 10 5	15,466 10 5
14	8,275 15 0	.....	.....	12	3,031 15 0	11,307 14 0
10	4,802 4 0	.....	.....	10	2,111 4 0	6,913 8 0
16	8,356 6 0	.....	.....	16	4,088 10 0	12,445 0 0
13	6,193 13 0	.....	.....	13	2,816 12 0	9,010 9 0
13	5,489 10 0	.....	.....	13	2,346 9 0	7,836 3 0
7	3,211 2 0	.....	.....	7	1,588 14 0	4,800 0 0
89	46,109 2 0	4	5,708 5 0	97	22,253 11 5	92,780 7 5
9	8,262 14 0	3	2,658 11 0	22	4,308 9 0	38,179 12 0
.....	.....	.....	.....	.....	.....	.....
.....	2,25,177 10 11	.....	31,287 12 0	.....	1,00,468 8 6	4,86,184 5 5

STATEMENT

No	Circles and Districts.	Expenditure—*contd.*			
		Travelling Allowances.	Contingencies.	Total Cost.	Imperial Funds.
	GUJARAT REGISTRATION DISTRICT.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	Administrative Charges ...	5,256 10 0	1,609 6 0	23,638 12 0	.....
17	Surat Collectorate	3,065 14 0	639 7 0	13,200 6 0	.....
18	Broach do.	1,300 15 0	173 9 3	5,767 13 3	.....
19	Kaira do.	2,437 0 6	437 7 0	10,324 8 6	.....
20	Panch Mahals do.	1,715 1 0	224 8 3	6,726 0 3	.....
21	Ahmedabad do.	2,984 9 0	1,247 8 0	17,122 4 0	.....
	Total ...	16,760 1 6	4,331 13 6	76,774 6 0	.....
	SIND REGISTRATION DISTRICT.				
	Administrative Charges ...	8,554 9 0	2,847 11 11	36,402 15 11	.....
22	Karachi Collectorate	4,483 7 2	749 15 8	20,700 1 3	.....
23	Hyderabad do.	3,170 4 0	468 9 10	14,946 11 10	.....
24	Nawabshah do.	2,397 3 0	444 0 9	9,754 11 9	.....
25	Thar and Parkar Collectorate ...	4,007 5 0	702 4 3	17,154 9 3	.....
26	Larkana do. ...	2,966 5 0	524 5 11	12,501 3 11	.....
27	Sukkur do. ...	2,896 12 0	543 4 0	11,276 3 0	.....
28	Jacobabad do. ...	1,482 7 0	288 13 0	6,571 4 0	.....
	Total ...	29,958 4 2	6,569 1 4	1,29,307 12 11	.....
	VACCINE INSTITUTE.				
29	Belgaum	2,205 8 0	32,778 7 3	*22,746 1 0	.....
30	Aden	.....	.....	5,378 1 0	.....
	TOTAL OF PRESIDENCY ...	135,567 15 6	80,927 12 11	6,57,640 8 7	.....

	Rs. a. p.
*Total expenditure ...	73,163 11 3
Deduct—Sale-proceeds ...	50,417 10 3
Total ...	22,746 1 0

No. II—*concld.*

Paid from				Total.	Number of all successful Vaccinations and Re-Vaccinations.	Average cost of each successful case.
Provincial Funds.	Local Funds.	Municipality.	Indian States.			
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.
23,633 12 0	.....	.....	.....	23,633 12 0	...	.....
2,827 1 0	8,848 5 0	1,525 0 0	.....	13,200 6 0	14,002	0 14 1
990 8 0	3,818 10 0	958 10 3	.....	5,767 12 3	8,335	0 11 1
1,838 0 0	7,125 10 6	1,360 9 0	.....	10,324 3 6	14,925	0 11 1
1,319 15 0	4,689 1 3	717 0 0	.....	6,726 0 3	11,160	0 8 5
2,634 12 0	7,681 15 0	6,805 9 0	.....	17,122 4 0	24,151	0 11 4
33,244 0 0	32,163 9 9	11,366 12 3	.....	76,774 6 0	72,573	1 0 4
36,402 15 11	.....	.....	.....	36,402 15 11	...	.....
1,955 3 0	10,312 7 4	8,432 6 11	.....	20,700 1 3	16,812	1 3 8
1,239 12 0	11,060 11 10	2,646 4 0	.....	14,946 11 10	16,778	0 14 3
1,702 1 0	8,052 10 9	.....	.....	9,754 11 9	14,645	0 10 7
2,578 12 0	14,575 13 3	.....	.....	17,154 9 3	14,114	1 3 5
2,530 4 0	9,093 0 11	877 15 0	.....	12,501 3 11	15,117	0 13 2
1,826 10 0	6,851 8 6	2,598 0 6	.....	11,276 3 0	15,351	0 11 9
1,274 1 0	4,484 15 0	812 4 0	.....	6,571 4 0	8,014	0 13 1
49,509 10 11	64,431 3 7	15,366 14 5	.....	1,29,307 12 11	100,831	1 4 6
22,746 1 0	.....	.....	.....	22,746 1 0	...	.....
.....	.....	.....	.....	5,378 1 0	576	.....
2,60,456 7 2	2,78,188 8 3	113,617 8 2	.....	6,57,640 8 7	621,323	1 0 9

STATEMENT

Comparative Statement showing the number of persons successfully vaccinated in each

Establishment.	Persons Primarily			
	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.
	Years ended			
	1921-1922.		1922-1923.	
Municipal	80,258	69,818	80,048	70,658
Local Fund	455,216	413,165	466,085	423,766
Cantonment	1,914	1,588	1,421	1,230
Dispensaries	877	729	780	685
Total ...	538,265	485,300	548,334	495,389

Establishment.	Persons Primarily			
	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.
	Years ended			
	1926-1927.		1927-1928.	
Municipal	114,209	77,609	100,264	77,224
Local Fund	504,987	449,538	508,298	451,750
Cantonment	2,213	1,902	1,954	1,663
Dispensaries	773	514	808	609
Total ...	622,182	529,563	611,324	531,246

No. IV.

primarily vaccinated and the number of those persons who were of the undermentioned official years.

VACCINATED.

Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.
ON 31ST MARCH.					
1923-1924.		1924-1925.		1925-1926.	
85,903	75,966	85,254	76,025	88,184	73,984
486,311	441,967	484,794	436,886	504,178	452,368
2,366	2,187	1,291	1,097	1,720	1,125
662	479	813	596	929	542
575,242	520,601	572,152	514,604	590,011	528,019

VACCINATED—*continued.*

Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.
ON 31ST MARCH—*continued.*					
1928-1929.		1929-1930.		1930-1931.	
91,310	79,338	148,528	102,083	94,477	77,542
509,413	453,556	507,869	452,710	497,071	451,603
2,055	1,737	3,093	2,733	1,342	1,269
1,348	1,229	2,791	2,457	1,902	1,577
610,126	535,860	662,281	559,983	594,792	531,991

STATEMENT

Showing Particulars of Vaccination

District.		Total number of persons vaccinated.		Total number inspected.			
				By Assistant Directors of Public Health or Civil Surgeons.		By Native Superintendents or other Inspecting Officers.	
		Primary.	Re-vaccinations	Primary.	Re-vaccinations	Primary.	Re-vaccinations
Western Registration District.	East Khandesh ...	31,413	21,290	3,693	64	16,016	2,216
	West Khandesh ...	23,795	7,536	1,094	129	8,148	1,007
	Nasik ...	29,805	4,805	322	39	8,147	113
	Thana ...	28,857	3,705	...	...	5,162	158
	Bombay Suburban ...	4,426	1,549	...	...	284	54
	Kolaba ...	21,389	5,687	1,086	...	2,628	201
	Bombay City ...	17,943	17,986	2,827	...	3,487	...
Central Registration District.	Ahmednagar ...	27,223	15,835	702	...	8,453	...
	Poona ...	29,304	9,109	395	...	3,759	15
	Sholapur ...	26,319	8,575	1,722	...	7,726	...
	Satara ...	33,589	68,215	141	...	11,529	...
	Ratnagiri ...	35,709	19,029	...	...	9,846	1,486
Southern Registration District.	Belgaum ...	31,595	21,151	2,988	184	3,174	261
	Dharwar ...	33,131	29,472	967	79	8,037	761
	Bijapur ...	28,034	27,339	1,395	25	7,641	507
	Kanara ...	10,218	8,183	...	...	3,337	573
Gujarat Registration District.	Surat ...	15,885	1,686	61	...	3,875	184
	Broach ...	9,287	591	...	...	3,149	149
	Kaira ...	16,296	1,383	2,553	111	4,356	83
	Panch Mahals ...	12,373	591	396	5	4,051	60
	Ahmedabad ...	26,593	1,926	1,407	93	10,498	375
Sind Registration District.	Karachi ...	18,671	8,953	...	...	2,084	679
	Hyderabad ...	16,347	4,820	...	...	4,162	816
	Nawabshah ...	13,762	5,060	534	26	1,877	167
	Thar and Parkar ...	18,373	5,523	...	...	4,762	1,707
	Larkana ...	14,711	4,367	...	...	6,387	1,186
	Sukkur ...	14,154	10,502	1,604	82	3,737	1,881
	Upper Sind Frontier ...	8,094	1,668	177	...	1,791	281
	Total for the Province ...	587,303	316,676	24,064	837	158,053	14,920

No. V.

verified by Inspecting Officers in 1930-31.

Percentage of Inspections to total number vaccinated.				Percentage of cases found successful of total number inspected.				Percentage of success reported by Vaccinators.	
By Assistant Directors of Public Health or Civil Surgeons.		By Native Superintendents or other Inspecting Officers.		By Assistant Directors of Public Health or Civil Surgeons.		By Native Superintendents or other Inspecting Officers.			
Primary.	Re-vaccinations.	Primary.	Re-vaccinations	Primary.	Re-vaccinations	Primary.	Re-vaccinations	Primary.	Re-vaccinations.
11·75	0·30	50·96	10·41	86·94	6·25	88·63	6·59	65·49	3·60
4·50	1·70	34·16	13·18	88·48	6·96	86·95	4·69	46·65	8·10
1·08	0·81	27·33	2·35	93·48	71·79	90·01	14·16	34·02	1·58
...	...	21·22	4·26	...	...	98·14	39·67	33·93	4·80
...	...	6·42	3·49	...	...	96·13	25·93	11·39	9·62
5·08	...	12·28	3·53	95·76	...	14·55	43·28	22·60	2·74
15·75	...	19·43	...	99·82	...	99·91	...	99·28	...
2·51	...	31·05	...	99·43	...	99·70	...	94·39	70·43
1·35	...	12·83	·016	99·24	...	99·10	53·33	91·19	46·12
6·54	...	29·34	...	96·30	...	99·11	...	92·27	72·67
0·41	...	34·32	...	99·58	...	99·20	...	83·53	80·01
...	...	27·57	78·09	...	...	99·42	66·76	95·23	64·37
9·46	0·87	10·05	1·23	99·83	25·00	99·65	52·49	94·90	32·45
2·92	0·27	24·27	2·58	99·69	26·58	99·43	31·41	96·85	29·41
1·98	0·09	27·26	1·65	99·64	44·44	99·08	38·86	97·94	35·48
...	...	32·64	70·02	...	...	100·00	46·77	97·74	45·69
0·38	...	24·39	10·91	98·36	·00	99·26	40·76	85·70	23·07
...	...	33·91	25·21	...	·00	99·11	30·20	88·39	21·32
8·03	26·73	6·00	99·69	37·84	99·74	50·60	35·00	90·19	16·41
3·20	0·85	32·76	10·15	99·24	80·00	99·63	38·33	89·42	15·91
5·29	4·83	39·49	19·47	98·93	36·56	98·95	31·20	89·69	16·17
...	...	11·16	7·58	...	...	98·95	5·87	86·82	7·94
...	...	26·07	16·93	...	...	98·83	5·88	94·44	39·25
3·75	0·51	13·64	3·30	100·00	100·00	99·68	5·39	75·91	28·66
...	...	35·61	30·91	...	...	75·09	6·97	96·01	29·66
...	...	43·07	27·16	...	...	99·01	4·21	95·01	23·07
11·33	0·77	26·40	17·64	100·00	100·00	99·68	5·85	90·75	26·51
2·19	...	22·12	16·80	100·00	100·00	22·33	3·92	94·08	27·81
4·20	0·22	25·36	1·14	...	...	...	...	...	...

APPENDIX

STATEMENT

Showing the Particulars of Vaccination in

Number.	Circles and Districts.	Population of District according to Census of 1921.	Average Population per square mile.	Average Number of Vaccinators employed throughout the year.
1	2	3	4	5
1	Idar	202,811	64	6
2	Cambay	71,679	207	2
3	Aundh (Pant Pratinidhi)	64,560	...	2
4	Akalkot	81,250	...	2
5	Bhor (Pant Sachiv)	130,420	...	3
6	Phaltan	43,286	...	1
7	Sávantwádi	206,440	...	6
8	Sangli State	221,321	199	6
9	Jamkhandi State	101,195	193	4
10	Miraj Senior State	82,580	241	2
11	Miraj Junior State	34,665	164	1
12	Kurundwad State (Senior)	38,760	210	1
13	Kurundwad State (Junior)	34,296	296	1
14	Mudhol	60,140	167	1
15	Ramdurg	33,997	205	1
16	Kolhápur	833,726	2,590	13
17	Janjira	87,534	270	2
18	Bansda	40,125	187	1
	Carried over ...	.....	...	.....

V.

No. I.

Indian States during the year 1930-31.

Total Number of Persons vaccinated.			Average Number of persons vaccinated by each Vaccinator.	Primary Vaccination.			
				Total.	Successful.		
					Under one year.	One and under six years.	Total of all ages.
6			7	8	9	10	11
Males.	Females.	Total.					
P. 4,590	4,378	8,968	1,621	8,968	6,519	2,441	8,960
R. 814	...	814					
P. 1,279	1,154	2,433	1,216	2,433	2,066	351	2,384
R. 101	...	101					
P. 1,172	1,178	2,350	1,731	2,350	1,659	566	2,240
R. 708	405	1,113					
P. 1,453	1,193	2,646	1,513	2,646	1,946	529	2,600
R. 340	40	380					
P. 2,008	1,951	3,959	1,509	3,959	2,716	966	3,724
R. 467	102	569					
P. 614	625	1,239	1,278	1,239	928	299	1,178
R. 30	9	39					
P. 3,319	3,155	6,474	1,178	6,474	4,777	1,686	6,473
R. 400	194	594					
P. 4,227	4,133	8,360	1,766	8,360	6,782	1,484	8,347
R. 1,806	427	2,233					
P. 1,957	1,866	3,823	1,378	3,823	2,919	812	3,820
R. 1,215	472	1,687					
P. 2,109	1,689	3,798	1,981	3,798	3,182	597	3,791
R. 128	36	164					
P. 531	478	1,009	1,163	1,009	678	310	1,009
R. 141	13	154					
P. 661	705	1,366	3,732	1,366	1,072	214	1,298
R. 1,660	706	2,366					
P. 708	682	1,390	2,082	1,390	998	364	1,386
R. 602	90	692					
P. 951	879	1,830	3,110	1,830	1,418	376	1,827
R. 1,043	237	1,280					
P. 737	621	1,358	1,677	1,358	1,156	200	1,352
R. 250	69	319					
P. 14,183	13,817	28,000	2,432	28,000	24,384	2,974	27,521
R. 2,980	636	3,616					
P. 1,250	1,233	2,483	1,379	2,483	1,369	1,052	2,457
R. 167	98	265					
P. 839	666	1,505	1,505	1,505	536	305	1,126
R. 22	...	22					
P. ...	...	...	...	...	...	...	...
R.							

APPENDIX

STATEMENT

Number.	Circles and Districts.	PRIMARY VACCINATION—*contd.*	RE-VACCINATION.			Percentage successful which were
		Unknown.	Total.	Successful.	Unknown.	Primary.
1	2	12	13	14	15	16
1	Idar	2	814	721	50	99·91
2	Cambay	32	101	64	26	97·09
3	Aundh (Pant Pratinidhi)	106	1,113	323	93	100·00
4	Akalkot	46	380	365	15	100·00
5	Bhor (Pant Sachiv)	230	569	346	41	99·87
6	Phaltan	61	39	29	...	100·00
7	Sawantwadi	1	594	559	5	100·00
8	Sangli State	8	2,233	1,691	46	99·94
9	Jamkhandi State	2	1,687	1,876	51	99·99
10	Miraj Senior State	7	164	128	9	100·00
11	Miraj Junior State	...	154	154	...	100·00
12	Kurundwad State (Senior)	68	2,366	782	583	100·00
13	Kurundwad State (Junior)	4	692	408	1	100·00
14	Mudhol	1	1,280	328	208	99·89
15	Ramdurg	6	319	261	27	100·00
16	Kolhápur	477	3,616	3,276	300	99·99
17	Janjira	25	265	245	7	99·36
18	Bansda	379	22	12	4	·74
	Grand Total ...	...	...	...	...	...

V—*contd.*

No. I—*contd.*

tage of successful cases in the results known.	Persons successfully vaccinated per 1,000 of Population.	Percentage of unknown cases to total cases.		Average annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
Re-vaccination.		Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
17	18	19	20	21	22	23	24
88·57	42·76	0·22	6·14	7,831	97·37	...	...
6·05	33·09	1·03	...	2,392	98·03	...	...
31·67	39·70	4·51	8·36	1,984	30·73	...	...
100·00	36·49	1·74	3·95	2,892	35·59	...	...
65·53	31·21	5·81	7·21	3,944	30·24	...	...
74·36	17·88	4·92	..	1,412	32·64	...	...
94·91	34·06	0·02	0·84	6,582	28·98	...	...
77·32	45·35	0·10	2·06	8,156	36·85	...	...
84·11	51·35	0·05	3·02	4,558	45·04	...	...
82·58	47·46	0·18	5·49	3,859	46·61	...	...
100·00	33·55	...	...	1,147	33·09	...	...
43·86	53·66	4·98	26·64	1,561	40·27	...	...
59·04	52·31	0·30	0·14	1,403	40·19	...	...
30·60	33·84	0·05	16·25	2,056	34·19	...	...
89·38	47·45	0·44	8·46	1,437	42·27	...	...
98·79	36·94	1·20	8·30	3,680	36·80	...	...
99·96	30·87	1·00	26·41	2,276	24·00	...	...
5·05	2·03	2·05	0·41	1,049	...	...	...
...	...	...	...	...	...	...	...

Number.	Circles and Districts.	Population of District according to Census of 1921.	Average Population per square mile.	Average Number of Vaccinators employed throughout the year.
1	2	3	4	5
	Brought forward ...	.....	...	.....
	Savanur	16,830	240	1
	Jath and Daflapur	82,654	84	2
	Jawhar State	49,662	161	1
	Surgana State	14,912	41	1
	Rewa Kantha Agency	753,058	152	16
	Mahi Kantha	195,246	138	4
	Dangs	24,481	25	1
	Jambughoda	9,540	6,520	1
	Sadra Dispensary	.....	...	1
	Khairpur State	193,131	...	1
	Total ...	3,708,299	...	84

V—*contd.*

Total Number of Persons vaccinated.			Average Number of persons vaccinated by each Vaccinator.	Primary Vaccination.			
					Successful.		
				Total.	Under one year.	One and under six years.	Total of all ages.
6			7	8	9	10	11
Males.	Females.	Total					
.....	...	.....	...	...	....	...	...
P. 392	326	718	1,372	718	662	49	716
R. 1,461	564	2,025					
P. 1,255	1,082	2,337	1,935	2,334	1,380	946	2,337
R. 1,312	220	1,532					
P. 744	715	1,459	1,529	1,459	898	345	1,249
R. 45	25	70					
P. 56	35	91	91	91	25	39	64
R. ...	...	...					
P. 12,964	12,352	25,316	1,762	25,316	21,231	2,662	23,987
R. 2,047	837	2,884					
P. 2,965	2,835	5,800	1,901	5,800	4,871	595	5,492
R. 1,302	503	1,805					
P. 561	494	1,055	1,066	1,055	386	561	952
R. 10	1	11					
P. 169	169	338	2,911	338	194	99	332
R. 1,367	1,206	2,573					
P. 3	3	6	6	6	6	...	6
R. ...	...	...					
P. 2,741	2,324	5,065	1,009	5,066	3,672	1,227	4,928
R. 911	78	989					
P. 66,438	60,738	127,176	1,779	127,177	98,130	22,049	124,556
R. 24,329	6,968	28,297					

Number.	Circles and Districts.	Primary Vaccination—*contd.*	Re-vaccination.			Percentage successful which were
		Unknown	Total.	Successful.	Unknown	Primary.
1	2	12	13	14	15	16
	Brought forward ...	...	...	...	...	...
	Savanur	2	2,025	1,313	253	100 00
	Jath and Daflapur	...	1,582	408	553	100·00
	Jawhar State	210	70	11	58	100·00
	Surgana State	27	...	...	...	100·00
	Rewa Kantha Agency	1,322	2,884	786	560	99·97
	Mahi Kantha	286	1,805	585	403	99·60
	Dangs	103	11	1	8	100·00
	Jambughoda	6	2,573	1,232	348	100·00
	Sadra Dispensary	...	...	...	...	100·00
	Khairpur State	136	989	381	339	99·95
	Total ...	3,547	28,297	15,735	3,988	98·32

V—*contd.*

tage of successful cases in the results known.	Persons successfully vaccinated per 1,000 of Population.	Percentage of unknown cases to total cases.		Average annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
Re-vaccination.		Primary.	Re-vaccination.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
17	18	19	20	21	22	23	24
...	...	...	...	..	...	...	...
74·10	120·56	0·28	12·49	1,030	61·20	...	...
41·68	33·21	...	36·09	2,283	27·62	...	...
91·37	25·37	14·39	...	1,427	28·73	...	...
...	1·29	29·87	...	286	18·19	...	...
33·82	32·90	5·22	19·41	23,478	31·18	...	...
28·16	30·87	4·93	22·23	5,728	25·56	...	...
33·03	38·52	9·76	72·73	799	32·63	...	...
55·37	163·94	1·77	13·52	363	38·05	...	...
...	...	...	...	117	...	...	..
58·62	27·49	2·68	34·28	4,882	25·28	...	...
64·73	37·02	2·79	14·09	125,612	33·87	...	...

STATEMENT No. I—*concld.*

Summary

	Total number of persons vaccinated.		Total number of operations performed.		Percentage of successful cases in which results were known.	
	Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination.
By Special Staff (Statement I).	1,24,121	24,740	1,24,122	24,740	98·28	65·01

	Average number of persons vaccinated by each vaccinator.		Number of children successfully vaccinated.		Ratio of successful vaccinations per 1,000 of population.	Total cost of Department.	Average cost of each successful case.
	Vaccinators employed.	Persons vaccinated by each vaccinator.	Under one year.	One and under six years.		Rs. a. p.	Rs. a. p.
By Special Staff (Statement I).	81	1,838	96,388	21,054	36·72	65,111 0 0	0 7 9

STATEMENT II

STATEMENT

Showing the Cost of the Department in

No.	Circles and Districts.	European Supervising Officers.	Pay.	Inspectors of Sanitation and Vaccination.	Pay.	Vaccinators.	Pay.	Clerks.	Pay.	Expend
			Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.	
1	Idar State		...	1	360 0 0	6	1,218 0 0	...	...	
2	Cambay		...	2	2,630 0 0	2	690 0 0	...	...	
3	Akalkot		...	1	480 0 0	2	590 10 0	...	...	
4	Phaltan		...	...	...	1	240 0 0	...	...	
5	Bhor		...	1	372 0 0	4	580 6 5	...	...	
6	Savantwadi		...	1	720 0 0	6	1,668 0 0	...	...	
7	Aundh (Pant Pratinidhi). ...		...	...	...	2	605 0 0	...	...	
8	Kolhapur State		...	1	600 0 0	13	4,278 14 6	1	300 0 0	
9	S. M. Country States. ...		...	8	3,136 0 0	17	4,474 8 0	1	180 0 0	
10	Janjira		...	...	...	2	783 0 0	...	...	
11	Bansda		...	1	...	1	144 0 0	...	...	
12	Jawhar		...	...	...	1	360 0 0	...	...	
13	Surgana		...	...	...	...	...	...	...	
14	Mahi Kantha		...	1	720 0 0	4	1,435 3 0	...	...	
15	Rewa Kantha		...	...	...	17	5,336 0 2	...	...	
16	Savanur		...	...	60 0 0	2	...	...	...	
17	Jath and Daflapur		...	...	25 0 0	2	408 0 0	...	...	
18	Khairpur		...	...	...	6	2,543 2 3	...	...	
	Total		...	17	9,103 0 0	87	25,304 12 4	2	480 0 0	

No. II.

the Indian States during the year 1930-31.

iture.						Paid from	
Peons, etc.	Pay.	Total Pay of Establishment.	Travelling Allowances.	Contingencies.	Total Cost.	Imperial Funds.	Provincial Funds.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
7	661 12 0	2,239 12 0	480 0 0	835 8 0	3,555 4 0	...	...
2	300 0 0	3,620 0 0	180 0 0	337 9 6	4,137 9 6	.....	...
3	442 0 0	1,512 10 0	385 5 0	19 8 0	1,917 7 0	...	...
1	100 0 0	340 0 0	99 14 0	28 13 3	468 11 3	...	...
4	415 13 3	1,318 3 8	353 4 0	278 2 6	1,949 10 2	...	...
6	864 0 0	3,252 0 0	549 8 10	173 19 0	3,975 4 10	...	...
2	216 0 0	831 0 0	372 0 0	14 10 0	1,207 10 0	...	...
14	2,452 0 0	7,630 14 6	1,850 0 0	491 12 6	9,982 11 0	...	...
26	3,055 8 1	10,846 0 1	3,519 5 8	145 5 6	14,510 11 3	...	...
2	216 0 0	999 0 0	240 0 0	64 14 0	1,303 14 0	...	...
1	90 0 0	234 0 0	196 0 0	105 0 0	1,535 0 0	...	...
1	149 15 0	479 15 0	165 6 6	.....	645 5 6	...	...
...	...	...	...	.....	.....	...	...
5	896 13 0	3,052 0 0	1,116 11 9	217 14 9	4,386 10 6	...	...
16	2,133 6 1	7,474 6 3	1,696 15 6	335 1 5	9,506 7 2	...	...
1	132 0 0	192 0 0	12 0 0	30 7 9	234 7 9	...	...
2	204 0 0	637 0 0	164 8 11	24 0 0	825 8 11	...	...
6	1,043 3 0	3,556 5 3	1,744 3 2	638 3 3	5,968 11 8	...	...
97	13,317 6 5	48,235 2 9	13,135 3 4	3,740 10 5	65,111 0 6	...	...

STATEMENT No. II—*concld.*

No.	Circles and Districts.	Paid from—*contd.*			Total.	Number of all successful Vaccinations and Re-vaccinations.	Average cost of each successful case.
		Local Funds.	Municipalities.	Indian States.			
		Rs.	Rs.	Rs. a. p.	Rs. a. p.		Rs. a. p.
1	Idar State	...	...	3,555 4 0	3,555 4 0	9,681	0 5 10
2	Cambay	...	...	4,137 9 6	4,137 9 6	2,448	1 11 4
3	Akalkot	...	...	1,917 7 0	1,917 7 0	2,965	0 10 4
4	Phaltan	...	...	468 11 3	468 11 3	1,207	0 6 3
5	Bhor	...	...	1,949 10 2	1,949 10 2	4,070	0 8 10
6	Savantwadi	...	...	3,975 4 10	3,975 4 10	7,032	0 9 1
7	Aundh (Pant Pratinidhi) ...	...	...	1,207 10 0	1,207 10 0	2,563	0 7 6
8	Kolhapur State	...	...	9,982 11 0	9,982 11 0	30,797	0 4 8
9	S. M. Country States	...	...	14,510 11 3	14,510 11 3	27,958	0 8 10
10	Janjira	...	....	1,303 14 0	1,303 14 0	2,702	0 7 8
11	Bansda	...	...	535 0 0	535 0 0	1,138	0 7 6
12	Jawhar	...	...	645 5 6	645 5 6	1,260	0 8 2
13	Surgana	...	...	...	...	64	...
14	Mahi Kantha	...	...	4,386 10 6	4,386 10 6	6,027	0 11 8
15	Rewa Kantha	...	...	9,506 7 2	9,506 10 6	24,773	0 6 2
16	Savanur	...	..	234 7 9	234 7 0	2,029	0 1 10
17	Jath and Daflapur	...	...	825 8 11	825 8 11	2,745	0 4 9
18	Khairpur	...	...	5,968 11 8	5,968 11 8	5,309	1 2 0
	Total ...	...	...	65,111 0 6	65,111 0 6	134,768	0 7 9

STATEMENT IV

STATEMENT

Showing the number of persons primarily vaccinated and the each of the under-

Establishments.	PERSONS PRIMARILY					
	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.
	YEARS ENDED					
	1921-1922.		1922-1923.		1923-1924.	
Idar	5,945	5,825	5,887	5,784	6,330	6,180
Cambay	2,121	2,060	2,047	1,881	2,167	2,130
Bhor (Pant Sachiv)	2,791	2,742	3,135	3,020	2,764	2,707
Phaltan	1,251	1,250	1,245	1,242	1,507	1,506
Sávantvádi	4,819	4,812	5,387	5,382	2,496	2,361
Aundh	1,965	1,824	2,071	1,906	6,064	6,063
Akalkot	3,149	3,072	3,010	2,965	1,890	1,882
Janjira	1,915	1,906	2,019	2,013	2,145	2,142
Southern Maratha Country States...	20,821	20,747	21,062	21,006	20,924	20,866
Kolhapur	24,428	24,419	25,435	25,415	26,001	25,695
Bansda	1,454	1,391	1,262	1,150	1,496	1,349
Jawhar	1,281	1,224	1,322	1,321	5,130	1,528
Surgana	914	771	212	172	612	419
Mahi Kantha ...	5,427	4,798	5,098	4,756	5,516	4,923
Rewa Kantha	21,939	20,525	13,195	21,660	23,314	21,456
Savanur	742	686	847	788	814	785
Jath and Daflapur	2,470	2,470	2,194	2,194	2,399	2,395
Khairpur	5,128	5,124	5,279	5,178	5,397	5,264
Total ...	108,630	105,676	110,701	107,583	113,369	109,935

No. IV.

number of those persons who were successfully vaccinated in mentioned years.

VACCINATED.

Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated
ON 31ST MARCH.							
1924-1925.		1925-1926.		1926-1927.		1927-1928.	
6,021	5,899	5,788	5,768	6,039	5,998	7,073	7,064
2,438	2,384	2,407	2,320	2,295	2,262	2,314	2,292
3,988	3,788	3,921	3,673	3,511	3,335	4,184	3,985
1,356	1,356	1,315	1,315	1,401	1,401	1,448	1,448
6,637	6,637	6,212	6,206	6,321	6,317	6,368	6,360
1,968	1,779	1,615	1,406	2,080	1,902	1,895	1,687
2,970	2,930	2,718	2,692	2,622	2,594	2,757	2,726
2,172	2,166	2,194	2,161	2,164	2,149	2,028	2,014
20,867	20,810	22,241	22,181	21,745	21,637	22,706	22,593
27,158	27,155	26,372	26,361	27,047	27,044	31,424	31,420
1,221	1,173	1,426	1,245	1,190	939	216	166
1,203	1,158	1,682	1,574	1,572	1,486	1,504	1,302
501	385	438	366	456	392	455	299
5,777	5,316	5,612	5,188	5,610	5,126	5,998	5,458
23,832	22,306	24,351	22,523	23,961	22,252	23,752	21,655
836	787	713	657	699	631	820	761
1,705	1,703	2,398	2,389	2,090	2,084	2,096	2,093
5,658	5,526	5,570	5,384	5,363	5,166	5,167	4,897
116,310	113,259	116,977	113,209	116,166	112,715	122,205	118,220

STATEMENT No. IV—*concld.*

Establishments.	PERSONS PRIMARILY VACCINATED—*contd.*					
	YEARS ENDED ON 31ST MARCH—*contd.*					
	1928-1929.		1929-1930.		1930-1931.	
	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.
Idar	10,153	10,125	9,355	9,325	8,968	8,960
Cambay	2,395	2,382	2,676	2,644	2,433	2,384
Bhor (Pant Sachiv)	4,245	4,054	4,068	3,756	3,969	3,721
Phaltan	1,395	1,395	1,086	1,085	1,239	1,178
Sávantvádi	6,362	6,357	6,514	6,512	6,474	6,473
Aundh	2,134	1,839	2,472	2,296	2,350	3,240
Akalkot	2,826	2,793	2,973	2,894	2,646	2,600
Janjira	2,284	2,277	2,459	2,454	2,488	2,457
Southern Maratha Country States...	21,698	21,610	22,159	22,028	22,934	19,136
Kolhapur	28,669	28,650	28,255	27,497	28,000	27,521
Bansda	965	600	1,870	1,032	1,505	1,126
Jawhar	1,599	1,500	1,604	1,467	1,459	1,249
Surgana	398	355	...	...	91	64
Mahi Kantha	6,609	6,638	6,814	6,395	5,800	5,492
Rewa Kantha	25,992	24,221	26,178	24,569	25,316	23,987
Savanur	899	870	844	822	718	716
Jath and Daflapur	2,066	2,066	2,215	2,215	2,337	2,337
Khairpur	5,243	5,000	4,016	3,837	5,065	4,928
Total ...	125,932	122,732	125,558	120,749	127,176	121,556

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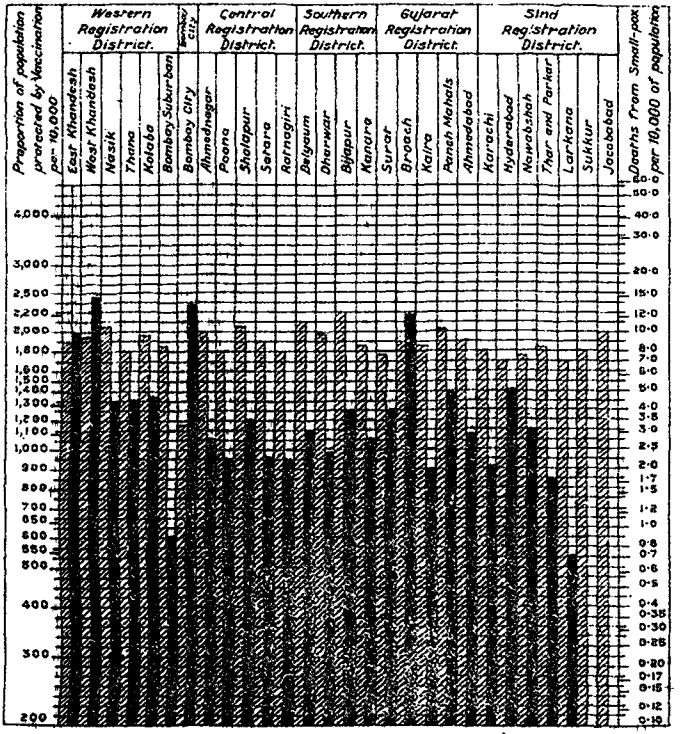
APPENDIX VI

Diagram illustrating the death rates from Small-pox during the year 1930-31 and the proportion of population protected by Vaccination during the seven years period from 1924-25 to 1930-31.

(NOTE:- Scale figures are at Log interval.)



Proportion of population protected by Vaccination during 7 years ending 31st March 1931.

Ratio of deaths from Small-pox per 10,000 of population during the year 1930-1931.

C.P.T.O. POONA. 1931

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